



# Shell Canada Products Heritage Hills NTI 471 Terry Fox Drive Kanata, Ontario

## DRAWING LIST - ISSUED FOR SPA

### GENERAL DRAWINGS - SPA

SHEET No.	SHEET TITLE
GENERAL - SPA	
G000.0	COVER SHEET
G001.0	CODE STUDY

### CIVIL DRAWINGS - SPA

SHEET No.	SHEET TITLE
C001.0	GENERAL NOTES
C100.0	ESC PLAN
C101.0	SITE PLAN
C102.0	SITE GRADING PLAN
C103.0	SITE SERVICING PLAN
C104.0	STORMWATER MANAGEMENT PLAN

### LANDSCAPE DRAWING - SPA

SHEET No.	SHEET TITLE
L101.0	LANDSCAPE PLAN
L501.0	PLANTING LIST
L502.0	LANDSCAPING DETAILS

### ARCHITECTURAL DRAWINGS - SPA

SHEET No.	SHEET TITLE
C-STORE SPA	
A101.1	EQUIPMENT LAYOUT
A201.1	EXTERIOR ELEVATIONS
A301.1	BUILDING SECTIONS
CANOPY SPA	
A101.2	FUEL PUMP PLAN, ROOF PLAN
A201.2	FUEL PUMP ELEVATIONS
CARWASH SPA	
A101.3	MAIN FLOOR PLAN, BUILDING SECTIONS
A201.3	EXTERIOR ELEVATIONS

### ELECTRICAL DRAWINGS

SHEET No.	SHEET TITLE
E101.0	SITE PHOTOMETRIC PLAN

## GENERAL NOTES

- DO NOT SCALE DRAWINGS
- ALL UNITS IN MILLIMETRES UNLESS OTHERWISE NOTED.
- ALL INTERIOR STEEL STUD PARTITIONS TO BE SECURED TO CONCRETE FLOOR SLAB WITH STUB NAILS OR POWER-FASTENERS (OR APPROVED EQUAL).
- ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING CODE (LATEST EDITION) AND THE NATIONAL ENERGY CODE (2014) AND ALL APPLICABLE PROVINCIAL, LOCAL AND MUNICIPAL REQUIREMENTS.
- PROVIDE SOLID BLOCKING AS REQUIRED FOR GRAB BARS, CHANGING TABLE AND FIXTURES IN WASHROOM. PROVIDE BLOCKING AS REQUIRED FOR FIRE EXTINGUISHERS.
- DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
- PROVIDE BLOCKING, STRAPPING, NAILING STRIPS, WOOD FRAMING, ETC. AS INDICATED ON DRAWINGS OR AS REQUIRED.
- ARCHITECTURAL DRAWINGS ARE TO BE PRINTED IN COLOUR FOR CLARITY.
- ALL SLABS, IN ALL BUILDINGS, INCLUDING SCREED, TO CONTAIN VAPOR LOK ADDITIVE, PER SPECIFICATIONS.



Canada Architects LTD.

### PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

### CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

### CONSULTANT

AECOM Canada Architects Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

### CONSULTANTS

AECOM Canada Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

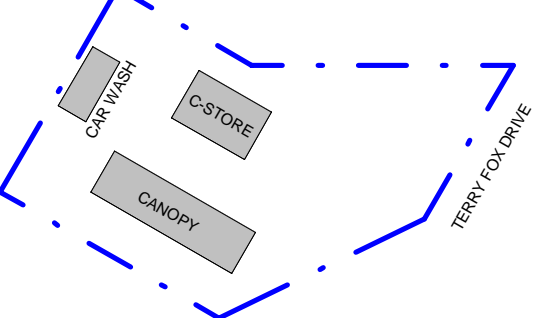


### REGISTRATION

### ISSUE/REVISION

C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.04	ISSUED FOR REVIEW
IR	DATE	DESCRIPTION

### KEY PLAN



### PROJECT NUMBER

60546152

### SHEET TITLE

### SITE

COVER SHEET

### AECOM FILE NAME

G000.0-COV-HEH

### SHEET NUMBER

G000.0



Project Management Initials: Designer: Designer Checked: Checker Approved: Approver ANSI D 22"x34"

C-STORE CODE STUDY

MUNICIPAL ADDRESS

471 TERRY FOX DRIVE  
KANATA, ONTARIO

LEGAL ADDRESS

BLOCK 170  
PLAN 4M-1413

FLOOR AREA & BUILDING HEIGHT

FLOOR AREA = 211 m<sup>2</sup>  
BUILDING HEIGHT (MAIN FLOOR TO UNDERSIDE OF ROOF)= 3810 mm  
BUILDING HEIGHT (MAIN FLOOR TO TOP OF ROOF) = 4960 mm  
HEIGHT OF ROOF = 1150 mm

APPLICABLE BUILDING CODE

ONTARIO BUILDING CODE 2012  
DIV. A 1.1.2.4 - PART 9 APPLIES FOR GROUP E

OCCUPANCY CLASSIFICATION

TABLE 9.10.2.1 GROUP E (MERCANTILE)

FIRE SEPARATIONS

9.10.10.3 1 HR FIRE SEPARATION REQUIRED AT SERVICE ROOMS  
9.10.10.6 45 MINUTE FIRE SEPARATION REQUIRED AT STORAGE ROOMS

OCCUPANT LOAD

9.9.1.3 CONFORMING TO TABLE 3.1.17.1

SALES AREA = 80.98m<sup>2</sup> @ 3.7m<sup>2</sup>/PERSON = 22 PERSONS  
OPERATIONS AREA = 8.66m<sup>2</sup> @ 9.30m<sup>2</sup>/PERSON = 1 PERSONS  
DELI BY SHELL = 20.57m<sup>2</sup> @ 9.30m<sup>2</sup>/PERSON = 3 PERSONS  
OFFICE = 5.00m<sup>2</sup> @ 9.30m<sup>2</sup>/PERSON = 1 PERSON  
STORAGE = 24.22m<sup>2</sup> @ 46.00m<sup>2</sup>/PERSON = 1 PERSON  
TOTAL OCCUPANT LOAD = 28 PERSONS

STAFF NUMBER = 6 PERSONS

LIMITING DISTANCE

PENDING SITE PLAN APPROVAL

9.10.14.4 CONFORMS TO TABLE 9.10.14.4 AND 9.10.14.5  
FACING TWO STREETS

NORTH WALL  
WALL AREA = 69.78 m<sup>2</sup>  
AREA OF OPENINGS = 0 m<sup>2</sup>  
% OF OPENINGS = 0%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = LESS THAN 1.2 m  
ACTUAL DISTANCE = 9.3 m (TO PROPERTY LINE)  
FRR REQUIRED = 0 HR

EAST WALL  
WALL AREA = 45.10 m<sup>2</sup>  
AREA OF OPENINGS = 2.0 m<sup>2</sup>  
% OF OPENINGS = 4.43%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = 3.0 m  
ACTUAL DISTANCE = 37.0 m (TO PROPERTY LINE)  
FRR REQUIRED = 0 HR

SOUTH WALL  
WALL AREA = 69.78 m<sup>2</sup>  
AREA OF OPENINGS = 21.60 m<sup>2</sup>  
% OF OPENINGS = 31.00%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = 10.0 m  
ACTUAL DISTANCE = 13.98 m (TO FACE OF CANOPY)  
FRR REQUIRED = 0 HR

WEST WALL  
WALL AREA = 45.10 m<sup>2</sup>  
AREA OF OPENINGS = 4.0 m<sup>2</sup>  
% OF OPENINGS = 8.80%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = LESS THAN 1.2 m  
ACTUAL DISTANCE = 10.4 m (TO CARWASH)  
FRR REQUIRED = 0 HR

ACCESS TO EXITS

9.9.3.2.(1) MIN. EXIT WIDTH = 900mm  
9.9.3.3.(1) MIN. CORRIDOR EXIT WIDTH = 1100mm  
9.9.3.4.(1) MINIMUM CLEAR HEIGHT IN EXITS AND ACCESS TO EXITS SHALL BE 2100mm  
9.9.8.2.(1) TWO EXITS REQUIRED.  
MAX TRAVEL DISTANCE TO NEAREST EXIT = 30.0 m

PLUMBING FIXTURES

9.31.1.(2) CONFORMING TO SECTION 3.7.4

3.7.4.8.(3)(b) NOT MORE THAN ONE WATER CLOET TO SERVE BOTH  
SEXES NEED BE PROVIDED IN A GROUP E OCCUPANCY  
WHERE THE TOTAL AREA OF THE OCCUPANCY IS NOT  
MORE THAN 300m<sup>2</sup>.

ONE WATER CLOSET TO SERVE BOTH SEXES (TWO  
WATER CLOSETS PROVIDED).

SPRINKLER AND FIRE ALARM SYSTEM REQUIRED

9.10.18.2 NOT REQUIRED

FIRE DEPARTMENT ACCESS TO BUILDING

9.10.20.3 ACCESS BY MEANS OF A STREET OR PRIVATE ROADWAY OR YARD

9.10.20.4 EXTINGUISHERS INSTALLED IN CONFORMANCE WITH PROVISIONS OF THE NATIONAL FIRE CODE

3.2.5.16 THE DISTANCE FROM THE FIRE DEPARTMENT CONNECTION TO A HYDRANT IS NOT MORE THAN 45m  
AND IS UNOBSTRUCTED.

BARRIER-FREE DESIGN

BUILDING SERVICE AREAS REQUIRE ABLE BODY ACTIVITY AND WHERE APPLICABLE ARE NOT DESIGNED TO BE ACCESSIBLE.

9.5.2.1.(1) CONFORMING TO SECTION 3.8

3.8.1.2.(1) ONE BARRIER-FREE ENTRANCE IN CONFORMANCE WITH SECTION 3.8.3.3.

3.8.1.3.(1) UNOBSTRUCTED WIDTH OF A BARRIER-FREE PATH OF TRAVEL SHALL NOT BE LESS THAN 1100mm

3.8.3.3 EVERY DOORWAY THAT IS IN A BARRIER-FREE PATH OF TRAVEL SHALL HAVE A CLEAR WIDTH NOT LESS THAN 860mm

3.8.1.3.(4) EVERY BARRIER-FREE PATH OF TRAVEL SHALL HAVE 1800mm x 1800mm UNOBSTRUCTED SPACE NOT MORE THAN 30m APART

3.8.2.3 A BARRIER-FREE PATH OF TRAVEL SHALL BE PROVIDED TO A BARRIER-FREE WASHROOM DESIGNED IN CONFORMANCE WITH SECTION 3.8.3.8 TO 3.8.3.12.

3.8.3.1.(1) ACCESSIBILITY SIGNS INCORPORATING THE INTERNATIONAL SYMBOL SHALL BE INSTALLED TO INDICATE THE LOCATION OF THE ENTRANCE AND LOCATION OF RAMPS SERVING THE ENTRANCE.

3.8.3.1.(2) WASHROOMS TO ACCOMMODATE DISABLED PERSONS SHALL BE IDENTIFIED BY A SIGN CONSISTING OF THE INTERNATIONAL SYMBOL.

3.8.3.2.(1) EXTERIOR WALKS SHALL HAVE A CONTINUOUS PLANE, HAVE A PERMANENT, FIRM, SLIP-RESISTANT SURFACE WITH AN UNINTERRUPTED WIDTH OF NOT LESS THAN 1100mm AND A GRADIENT NOT EXCEEDING 1 IN 20.

3.8.3.4. A CURB RAMP SHALL BE PROVIDED AND SHALL HAVE A SLOPE NOT MORE THAN 1 IN 12 WITH A WIDTH OF NOT LESS THAN 900mm BETWEEN HANDRAILS.

3.8.3.12 UNIVERSAL TOILET ROOM IS IN CONFORMANCE WITH THIS SECTION.

BUILDING ENVELOPE

9.36.1.3 (NBC 2015) - MERCHANTILE OCCUPANCY WITHOUT A HEAT-RECOVERY VENTILATOR - ZONE 6 (4000-4999 HDDs)

TABLE 9.36.2.6.A WALLS RSI 3.08 (R 17.49) INSULATION PROVIDED: RSI 6.30 (R 35.80)

TABLE 9.36.2.6.A ROOF RSI 4.67 (R 26.53) INSULATION PROVIDED: RSI 8.81 - 5.28 (R 50.00 - R 30.00) TAPERED

TABLE 9.36.2.8.A FLOOR RSI 2.32 (R 13.18) INSULATION PROVIDED: RSI 2.64 (R 15.00)

TABLE 9.36.2.8.A FOUNDATION RSI 2.98 (R 16.93) INSULATION PROVIDED: RSI 3.52 (R 20.00)

TABLE 9.36.2.7.A WINDOWS U 1.6

TABLE 9.36.2.7.A DOORS U 1.6

9.27.4 SEALANTS TO MEET REQUIREMENTS

CARWASH CODE STUDY

MUNICIPAL ADDRESS

471 TERRY FOX DRIVE  
KANATA, ONTARIO

LEGAL ADDRESS

BLOCK 170  
PLAN 4M-1413

FLOOR AREA & BUILDING HEIGHT

FLOOR AREA = 96 m<sup>2</sup>  
BUILDING HEIGHT (MAIN FLOOR TO UNDERSIDE OF ROOF)= 4400 mm  
BUILDING HEIGHT (MAIN FLOOR TO TOP OF ROOF) = 6000 mm  
TOTAL HEIGHT OF ROOF = 1600 mm

APPLICABLE BUILDING CODE

ONTARIO BUILDING CODE 2012  
DIV. A 1.1.2.4 - PART 9 APPLIES FOR GROUP F3

OCCUPANCY CLASSIFICATION

TABLE 9.10.2.1 GROUP F3 (LOW HAZARD INDUSTRIAL)

FIRE SEPERATIONS

9.10.10.3 1 HR FIRE SEPARATION REQUIRED AT SERVICE ROOMS  
9.10.10.6 45 MINUTE FIRE SEPARATION REQUIRED AT STORAGE ROOMS

OCCUPANT LOAD

9.9.1.3 CONFORMING TO TABLE 3.1.17.1  
CARWASH EXITING BASED ON MAXIMUM OCCUPANT  
LOAD OF A SINGLE VEHICLE.

LIMITING DISTANCE

PENDING SITE PLAN APPROVAL

9.10.14.4 CONFORMS TO TABLE 9.10.14.4 & TABLE 9.10.14.5 FACING TWO STREETS

NORTH WALL  
WALL AREA = 30.78 m<sup>2</sup>  
AREA OF OPENINGS = 11.10m<sup>2</sup>  
% OF OPENINGS = 36.06%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = 6.0 m  
ACTUAL DISTANCE = 15.0 m (TO PROPERTY LINE)  
FRR REQUIRED = 0 HR

EAST WALL  
WALL AREA = 65.93 m<sup>2</sup>  
AREA OF OPENINGS = 26.38 m<sup>2</sup>  
% OF OPENINGS = 40.01%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = 8.0 m  
ACTUAL DISTANCE = 10.4 m (TO C-STORE)  
FRR REQUIRED = 0 HR

SOUTH WALL  
WALL AREA = 30.78 m<sup>2</sup>  
AREA OF OPENING = 11.10m<sup>2</sup>  
% OF OPENINGS = 36.06%  
TYPE OF CONSTRUCTION = COMBUSTIBLE OR NON-COMBUSTIBLE  
TYPE OF CLADDING = COMBUSTIBLE OR NON-COMBUSTIBLE  
LIMITING DISTANCE = 6.0 m  
ACTUAL DISTANCE = 25.0 m (TO PROPERTY LINE)  
FRR REQUIRED = 0 HR

WEST WALL  
WALL AREA = 65.93 m<sup>2</sup>  
AREA OF OPENING = 0 m<sup>2</sup>  
% OF OPENINGS = 0 %  
TYPE OF CONSTRUCTION = NON-COMBUSTIBLE  
TYPE OF CLADDING = NON-COMBUSTIBLE  
LIMITING DISTANCE = LESS THAN 1.2 m  
ACTUAL DISTANCE = 1.2 m (TO PROPERTY LINE)  
FRR REQUIRED = 1 HOUR

ACCESS TO EXITS

9.9.3.2.(1) MIN. EXIT WIDTH = 900mm  
9.9.3.3.(1) MIN. CORRIDOR EXIT WIDTH = 1100mm  
9.9.3.4.(1) MINIMUM CLEAR HEIGHT IN EXITS AND ACCESS TO EXITS  
SHALL BE 2100mm  
9.9.7.4 -GROUP F3 MAX AREA = 200m<sup>2</sup>  
-GROUP F3 MAX DISTANCE TO EGRESS DOOR = 25m  
-GROSS FLOOR AREA = 96m<sup>2</sup>  
9.9.8.2.(2) 3 DOOR PROVIDED (2 OVERHEAD DOORS PROVIDED FOR  
VEHICULAR ACCESS)

PLUMBING FIXTURES

NOT APPLICABLE.

SPRINKLER AND FIRE ALARM SYSTEM REQUIRED

9.10.18.2 NOT REQUIRED

FIRE DEPARTMENT ACCESS TO BUILDING

9.10.20.3 ACCESS BY MEANS OF A STREET OR PRIVATE ROADWAY OR YARD

9.10.20.4 EXTINGUISHERS INSTALLED IN CONFORMANCE WITH PROVISIONS OF THE NATIONAL FIRE CODE

BARRIER-FREE DESIGN

9.5.2.1.(1) CONFORMING TO SECTION 3.8  
3.8.2.1.(1)(c) BUILDING IS NOT INTENDED TO BE OCCUPIED ON A DAILY OR FULL TIME BASIS

BUILDING ENVELOPE

9.36.1.3 (NBC 2015) - LOW HAZARD INDUSTRIAL OCCUPANCY WITHOUT A HEAT-RECOVERY VENTILATOR - ZONE 6 (4000-4999 HDDs)

TABLE 9.36.2.6.A WALLS RSI 3.08 (R 17.49) INSULATION PROVIDED: RSI 5.28 (R 30.00)

TABLE 9.36.2.6.A ROOF RSI 4.67 (R 26.53) INSULATION PROVIDED: RSI 8.81 - 5.28 (R 50.00 - R 30.00) TAPERED

TABLE 9.36.2.8.A FLOOR RSI 2.32 (R 13.18) INSULATION PROVIDED: RSI 2.64 (R 15.00) + IN-FLOOR HEATING

TABLE 9.36.2.8.A FOUNDATION RSI 2.98 (R 16.93) INSULATION PROVIDED: RSI 3.52 (R 20.00)

TABLE 9.36.2.7.A WINDOWS U 1.6

TABLE 9.36.2.7.A DOORS U 1.6 DOORS PER CAR WASH EQUIPMENT SUPPLIER

9.27.4 SEALANTS TO MEET REQUIREMENTS

AECOM

Canada Architects LTD.

PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca  
CONSULTANT

AECOM Canada Architects Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel604.294.8597 fax  
www.aecom.com

CONSULTANTS

AECOM Canada Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel604.294.8597 fax  
www.aecom.com



REGISTRATION

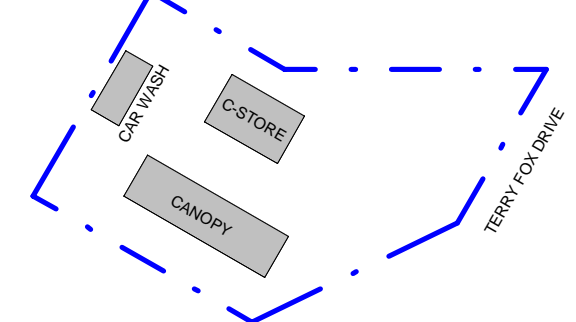
ISSUE/REVISION

C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.04	ISSUED FOR REVIEW
IR	DATE	DESCRIPTION

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

SITE

CODE STUDY

AECOM FILE NAME

G001.0-COS-HEH

SHEET NUMBER

G001.0



GENERAL NOTES

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT RAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- ALL WORKS SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE CONTRACTOR AND SUB CONTRACTORS ARE RESPONSIBLE TO ENSURE THAT THEIR CONSTRUCTION MATERIALS AND PRACTICES CONFORM TO THE LATEST CITY/ REGION STANDARDS, SPECIFICATIONS AND DESIGN CRITERIA. IN THE ABSENCE OF CITY/REGIONAL SPECIFICATIONS, THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) SHALL APPLY.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND IMPLEMENTING TEMPORARY TRAFFIC MANAGEMENT PLANS FOR CONSTRUCTION WITHIN THE CITY RIGHT OF WAY. ALL PLANS ARE TO FOLLOW THE REQUIREMENTS OF THE CITY AND PROVINCIAL STANDARDS (OTM BOOK 7).
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- THE CONTRACTOR, AT THEIR EXPENSE AND TO THE SATISFACTION OF THE CITY OF OTTAWA AND THE ENGINEER, SHALL BE RESPONSIBLE FOR THE RESTORATION AND THE REPAIR OF ALL AREAS DISTURBED DURING CONSTRUCTION ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND EXISTING UTILITIES TO EXISTING CONDITIONS OR BETTER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- ALL BACKFILL FOR SEWERS, WATERMAINS AND UTILITIES ON THE ROAD ALLOWANCE MUST BE MECHANICALLY COMPACTED.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND CITY SERVICES (WATER, SANITARY & STORM) PRIOR TO CONSTRUCTION. ANY DISCREPANCIES MUST BE REPORTED TO AECOM LTD.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT (PROJECT: 63993.58 DATED JUNE 12, 2018), PREPARED BY GEMTEC FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
- REFER TO STORMWATER MANAGEMENT REPORT PREPARED BY AECOM, DATED JANUARY \_\_ 2019
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- A UTILITY CLEARANCE RADIUS OF 1.2M BETWEEN THE PROPOSED DRIVEWAY ENTRANCE CURB RETURN AND ALL ABOVE GROUND UTILITIES MUST BE MAINTAINED.

GRADING NOTES

- ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF OTTAWA, THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (O.P.S.S.) AND THE ONTARIO BUILDING CODE (O.B.C.)
- ALL SURFACE DRAINAGE SHALL BE CONTAINED AT SITE, COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. DRAINAGE OF ABUTTING PROPERTIES SHALL NOT BE ADVERSELY AFFECTED. UNLESS NOTED OTHERWISE.
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
- THE SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
- ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST RESISTANT AND COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
- MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
- ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
- REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

SANITARY AND STORM SEWER NOTES

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT STANDARDS AND SPECIFICATIONS OF CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS.
- MAIN LINE PVC PIPE SHALL BE DR 35 AND SERVICE CONNECTION PVC PIPE SHALL BE DR 28.
- SERVICES ARE TO BE CONSTRUCTED TO 1.0M FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- BEDDING FOR FLEXIBLE PIPE SHALL BE AS PER OPSD 802.010, 802.013 OR 802.014.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO MINIMUM 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- MAINTENANCE HOLES AS PER OPSD 701.010 (1200MM), 701.011 (1500MM) AND 701.012 (1800MM).
- FRAME AND COVER AS PER OPSD 401.010 TYPE A CLOSED (SANITARY) AND 400.070 (STORM)
- SANITARY MAINTENANCE HOLE SHALL HAVE WATERTIGHT FRAME AND COVER IN PONDING AREAS AS PER OPSD 401.030.
- BENCHING SHALL BE AS PER OPSD 701.021.
- TRENCH WIDTH (SEPARATE TRENCH) AT TOP OF THE PIPE SHALL BE TO CITY OF OTTAWA STANDARD S6. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ADDITIONAL BEDDING AND/OR STRONGER PIPE IF ACTUAL TRENCH WIDTHS EXCEED DESIGN WIDTHS.
- ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, SHALL BE INSTALLED WITH LASER LEVEL AND CHECKED PRIOR TO BACKFILL AT THE CONTRACTOR'S EXPENSE.
- ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
- INSULATE ALL PIPES THAT HAVE LESS THAN 1.5M COVER WITH HI-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150MM CLEARANCE BETWEEN PIPE AND INSULATION.
- SERVICE CONNECTIONS AND UTILITY CUTS TO BE BACKFILLED WITH UNSHRINKABLE FILL.
- STORM PIPE LENGTHS ARE TO BARREL OF MANHOLE AND DO NOT INCLUDE BENCHING.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300MM SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600MM SUMPS UNLESS OTHERWISE INDICATED.
- ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600MM SUMPS.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- CONTRACTOR TO TELEWISE (CCTV) ALL PROPOSED SEWERS, 200MMØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

WATERMAIN NOTES

- SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA REPRESENTATIVES.
- PVC WATERMAINS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07
- WATER SERVICE CONNECTIONS TO C-STORE SHALL BE 50MM Ø TYPE "K" SOFT COPPER AS PER OPSD 1104.01.AND CONFORM TO ASTM B88-03 (ASTM B88M-05 FOR METRIC SIZES) .
- BEDDING SHALL BE AS PER CITY OF ATTAWA STANDARD DRAWING W17.
- THERMAL INSULATION IN SHALLOW TRENCHES AND ADJACENT TO OPEN STRUCTURES SHALL BE AS PER CITY OF ATTAWA STANDARD DRAWING W22 AND W23.
- MINIMUM COVER ON WATERMAINS SHALLBE 2.4 METRES.
- PROVISIONS FOR FLUSHING THE WATER LINE PRIOR TO TESTING AND SO FORTH MUST BE PROVIDED WITH AT LEAST A 50 MM OUTLET ON 100 MM AND LARGER LINES AS PER OPSD1104.03-1. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. ON FIRE LINES, FLUSHING OUTLET TO BE 100 MM DIAMETER MINIMUM OR A HYDRANT.
- ALL TEES, PLUGS, HORIZONTAL, VERTICAL BENDS, REDUCERS AND HYDRANTS TO HAVE CONCRETE THRUST BLOCKS AS PER OPSD 1103.01 AND 1103.021.
- PROPOSED WATER SERVICES ARE TO BE CONSTRUCTED TO WITHIN 1.0M OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
- WATERMAINS MUST FOLLOW THE MINISTRY OF THE ENVIRONMENT PROCEDURES THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS F-6-1. A MINIMUM VERTICAL CLEARANCE OF 0.30 METER OVER, 0.5 METER UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING. MUST ALSO MAINTAIN 2.5 METRES HORIZONTAL SEPARATION WITH SEWERS.
- ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATING FROM THE EXISTING SYSTEM. FLUSHING, SWABBING AND TESTING OF WATERMAIN AS PER ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS), AS WELL AS CITY OF OTTAWA SPECIFICATION.
- AFTER PASSING THE HYDROSTATIC PRESSURE TEST AND LEAKAGE TEST, CHLORINATION CAN PROCEED. SAMPLING OF THE NEW MAINS IS TO BE DONE AT THE REQUIRED LOCATIONS PRIOR TO CONNECTING TO THE CITY WATERMAIN SYSTEM. THE TEE FITTING IS TO BE CUT INTO THE EXISTING WATERMAIN TO MAKE THE CONNECTION, TO MAINTAIN THE PRESSURE IN THE NEW MAIN DURING INSTALLATION OF SERVICE, A 50MM BY-PASS WITH AN APPROVED PRESSURE DIFFERENTIAL BACKFLOW PREVENTER, MOUNTED ABOVE GROUND LEVEL IS TO BE INSTALLED AROUND THE CLOSED ISOLATING VALVE.
- CITY IN-SERVICE WATER VALVES CAN ONLY BE OPERATED BY CITY OF OTTAWA WATER STAFF.
- WATERMAINS TO BE INSTALLED TO GRADE AS SHOWN ON APPROVED PLANS, COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHEN REQUESTED BY INSPECTOR.
- VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. MAINLINE VALVES TO BE RESTRAINED AS PER CITY OF OTTAWA STD.
- THE CONTRACTOR SHALL COMPLETE THE NECESSARY WATER TESTING (I.E. PRESSURE TEST, FLUSHING, CHLORINATE, SAMPLING, ETC.)

CURB, SIDEWALK, AND PAVEMENT NOTES

- ALL CURBS SHALL BE BARRIER CURB (150MM) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1). MOUNTABLE CURBS ARE TO BE PER CITY OF OTTAWA STANDARD (SC1.3).
- THE GRANULAR SUB-BASE AND BASE SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- AT ALL ENTRANCES TO THE SITE THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE DRIVEWAY, THE DRIVEWAY GRADE WILL BE COMPATIBLE WITH THE EXISTING SIDEWALK AND CURB DEPRESSION WILL BE PROVIDED FOR EACH ENTRANCE. ACCESS CONSTRUCTION AS PER O.P.S.D. 350.010.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10), WHERE THE NEW PAVEMENT WILL ABUT EXISTING PAVEMENT, THE DEPTHS OF THE GRANULAR MATERIALS SHOULD TAPER UP OR DOWN AT 5 HORIZONTAL TO 1 VERTICAL, OR FLATTER TO MATCH THE DEPTHS OF THE GRANULAR MATERIAL(S) EXPOSED IN THE EXISTING PAVEMENT.
- THE PORTION OF THE DRIVEWAY WITHIN THE CITY BOULEVARD MUST BE PAVED TO THE LATEST CITY OF OTTAWA STANDARDS.
- PROVIDE LINE/PARKING PAINTING.
- PAVEMENT STRUCTURE FOR PARKING LOT AND ACCESS ROADWAYS:

100 MILLIMETRES ASPHALTIC CONCRETE, OVER

150 MILLIMETRES OF OPSS GRANULAR A BASE, OVER

450 MILLIMETRES OF OPSS GRANULAR B TYPE II SUBBASE

THE 100 MILLIMETRES ASPHALTIC CONCRETE SURFACE SHOULD CONSIST OF 40 MILLIMETRES OF SUPERPAVE 12.5

(TRAFFIC LEVEL B) OVER 60 MILLIMETRES OF SUPERPAVE 19.0 (TRAFFIC LEVEL B).



PROJECT

Shell Canada Projects  
HERITAGE HILLS  
Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

CONSULTANT

AECOM Canada Ltd.  
Fourth Floor, 3292 Production Way  
Burnaby, British Columbia V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



*Jan 31, 2019*

REGISTRATION

LEGAL DESCRIPTION  
BLOCK 170, PLAN 4M-1413

ISSUE/REVISION

A	2019.02.01	ISSUED FOR SPA
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60546152

SHEET TITLE

GENERAL NOTES

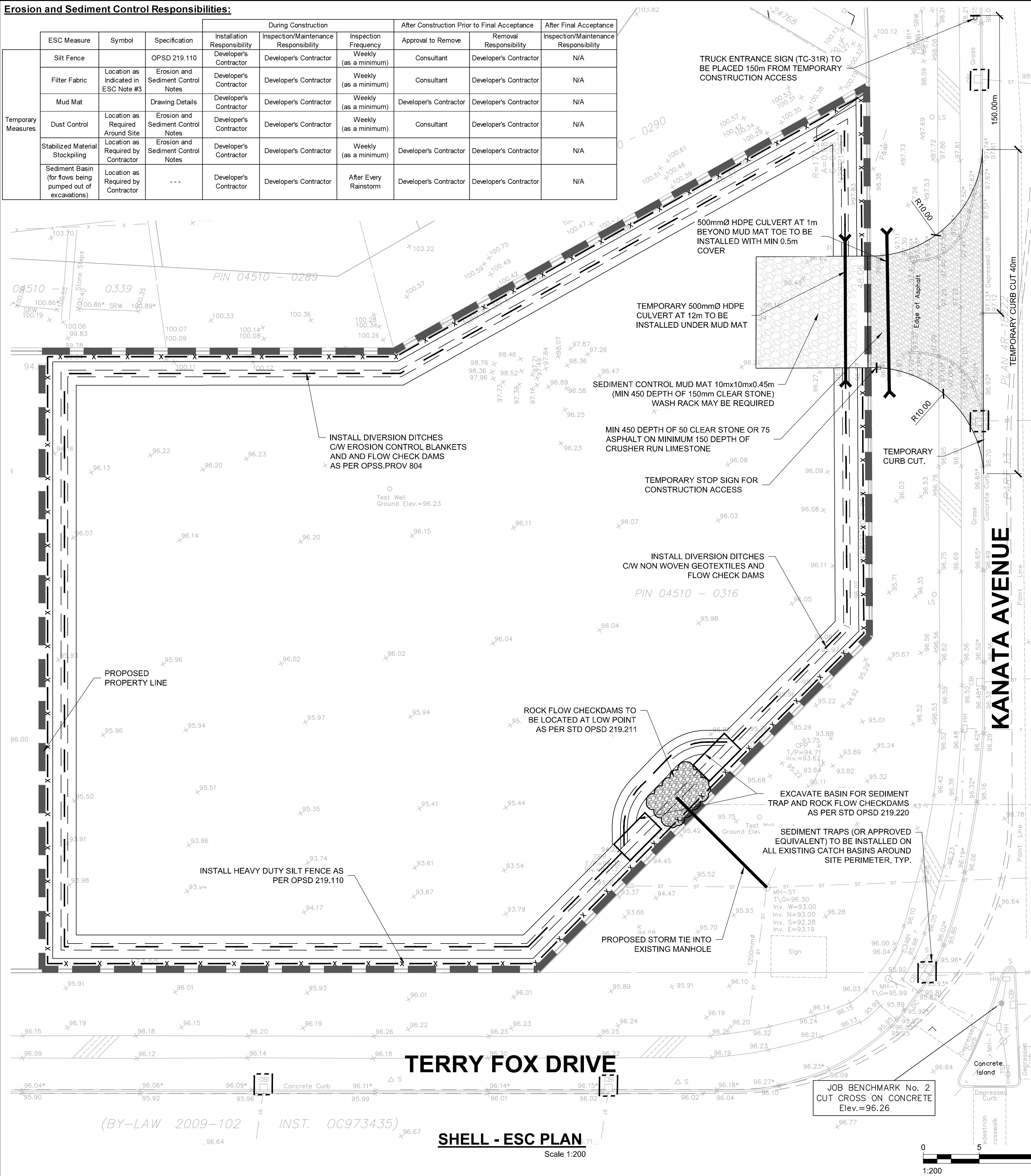
AECOM FILE NAME

C001.0-GNS-HEH

SHEET NUMBER

C001.0





**GENERAL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AND AS DIRECTED BY THE ENGINEER.
- ADDITIONAL EROSION AND SEDIMENT CONTROL (ESC) MEASURES MAY BE REQUIRED AND SHALL BE DETERMINED BY THE ENGINEER.
- SILT CONTROL FENCING SHALL BE INSTALLED ACCORDING TO THIS DRAWING AND MAINTAINED UNTIL COMPLETION OF THE LANDSCAPING AND SITE STABILIZATION.
- NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL INTRUDE BEYOND THE SILT/SNOW FENCE OR LIMIT OF DEVELOPMENT. ALL CONSTRUCTION VEHICLES SHALL LEAVE THE SITE AT DESIGNATED LOCATIONS AS SHOWN ON THE PLANS. ALL MATERIALS AND EQUIPMENT SHALL BE STORED ON SITE IN A DESIGNATED AREA. NO MATERIAL OR EQUIPMENT SHALL BE STORED ON THE MUNICIPAL RIGHT OF WAY. NO CONSTRUCTION VEHICLES WILL PARK ON THE MUNICIPAL ROADS.
- STOCKPILES SHALL BE SET BACK FROM ANY WATERCOURSE AND STABILIZED AGAINST EROSION AS SOON AS POSSIBLE. A SETBACK OF AT LEAST 15m FROM ANY TOP OF BANK OR WATERCOURSE IS REQUIRED.
- ALL EXPOSED SOILS SHALL BE IMMEDIATELY STABILIZED WITH A SEED AND MULCH APPLICATION AS DIRECTED BY THE ENGINEER.
- SERVICING OF CONSTRUCTION EQUIPMENT ON-SITE IS PROHIBITED.
- CLEANING OF EXISTING ROAD(S) AT SITE ACCESS POINTS SHALL BE DONE DAILY DURING CONSTRUCTION OR AS NECESSARY THROUGH REGULAR INSPECTION OR AS DIRECTED BY THE ENGINEER.
- DUST CONTROL TO BE REVIEWED DAILY. WATER TRUCK TO BE PROVIDED ON-SITE AND ALL HAUL ROAD / WORKING AREAS TO BE SPRAYED WITH WATER AS REQUIRED TO ENSURE DUST IS CONTROLLED ON-SITE.
- ALL RE-GRADED AREAS WITHIN THE SITE WHICH ARE NOT OCCUPIED BY BUILDINGS, ROADWAYS, SIDEWALKS OR DRIVEWAYS SHALL BE TOP-SOILED AND SODDED / SEEDED IMMEDIATELY AFTER COMPLETION OF FINAL GRADING OPERATIONS OR AS DIRECTED BY THE ENGINEER.
- SEDIMENT TRAPS (OR APPROVED EQUIVALENT) ARE TO BE INSTALLED AT ALL CATCHBASINS AND CATCHBASIN MANHOLE LOCATIONS UPON COMPLETION OF SERVICING.
- THE ESC STRATEGIES ON THESE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED / AMENDED AS SITE CONDITION CHANGES TO PREVENT SEDIMENT RELEASE TO THE NATURAL ENVIRONMENT. FAILED ESC MEASURE MUST BE REPAIRED IMMEDIATELY.
- MATERIALS TO REPAIR DAMAGED EROSION AND SEDIMENT CONTROL MEASURES MUST BE KEPT ON-SITE AT ALL TIMES.
- INSPECTION OF THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES WILL OCCUR ON A WEEKLY BASIS, AFTER SIGNIFICANT RAINFALL OR SNOW MELT EVENTS AND DAILY DURING EXTENDED RAIN OR SNOW MELT PERIODS.
- SEDIMENT / SILT SHALL BE REMOVED FROM THE SEDIMENT CONTROL DEVICE AND THE CATCHBASIN BUFFERS AFTER STORM EVENTS AND DISPOSED OF IN AREAS AS APPROVED BY THE ENGINEER.
- ALL LITTER AND DEBRIS SHALL BE MONITORED AND DISPOSED OF DAILY OR AS NECESSARY THROUGH REGULAR INSPECTION.
- ROCK CHECK DAMS ARE TO BE CLEANED OF ALL ACCUMULATED SEDIMENT AS SOON AS SEDIMENT HAS ACCUMULATED TO DEPTH GREATER THAN 50% OF THE UPSTREAM CHECK DAM.
- THE SILT FENCE MUST BE INSPECTED WEEKLY AND IMMEDIATELY AFTER RAINFALL OR SIGNIFICANT SNOW MELT EVENTS FOR RIPS AND TEARS, BROKEN STAKES, BLOW OUTS (STRUCTURAL FAILURE) AND ACCUMULATION OF SEDIMENT. THE SILT FENCE MUST BE FIXED AND / OR REPLACED IMMEDIATELY WHEN DAMAGED. ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE SILT FENCE WHEN ACCUMULATION REACHES 50% OF THE HEIGHT OF THE FENCE.

**SEDIMENT CONTROL CONSTRUCTION**

**SCHEDULE:**

- INSTALL PERIMETER ENVIRONMENTAL FENCE AND CONSTRUCTION VEHICLE ACCESS.
- EXCAVATE PERIMETER SWALES AND INSTALL CHECK DAMS.
- STRIP SITE OF TOPSOIL AND REMOVE OFF SITE.
- INSTALL MINOR STORM SEWER SYSTEM ALONG WITH OTHER SERVICES.
- INSTALL CATCHBASIN FILTRATION ON ALL CATCHBASINS AND CATCHBASIN MANHOLES.
- SEDIMENT CONTROL MEASURES ARE TO BE MAINTAINED UNTIL ALL AREAS OF THE SITE HAVE BEEN STABILIZED WITH SOD OR ASPHALT.

**MUD MAT:**

**STONE SIZE** - USE CLEAR CRUSHED 100mm STONE.

**THICKNESS** - NOT LESS THAN 300mm

**LENGTH** - AS REQUIRED

**WIDTH** - 10m MINIMUM, BUT NOT LESS THAN THE WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

**FILTER CLOTH** - NON-WOVEN GEOTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.

**MAINTENANCE** - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/ OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENTS. ALL SEDIMENTS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

**TIRE WASH STATION** - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON A DESIGNATED AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

**INSPECTION AND MAINTENANCE** - INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED PERIODICALLY AND AFTER SIGNIFICANT RAINFALL AND SNOWMELT.

**LEGEND:**

- HEAVY DUTY SILT FENCE
- MUD MAT CLEAR STONE
- MUD MAT LIMESTONE
- ULTIMATE PROPERTY LINE

**PROJECT**

Shell Canada Projects  
HERITAGE HILLS  
Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

**CLIENT**

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

**CONSULTANT**

AECOM Canada Ltd.  
Fourth Floor, 3292 Production Way  
Burnaby, British Columbia V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



Jan 31, 2019

**REGISTRATION**

LEGAL DESCRIPTION  
BLOCK 170, PLAN 4M-1413

**ISSUE/REVISION**

Issue/Revision	Date	Description
B	2019.02.01	ISSUED FOR SPA
A	2018.12.14	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

**KEY PLAN**

**PROJECT NUMBER**

60546152

**SHEET TITLE**

SITE EROSION AND  
SEDIMENT CONTROL PLAN

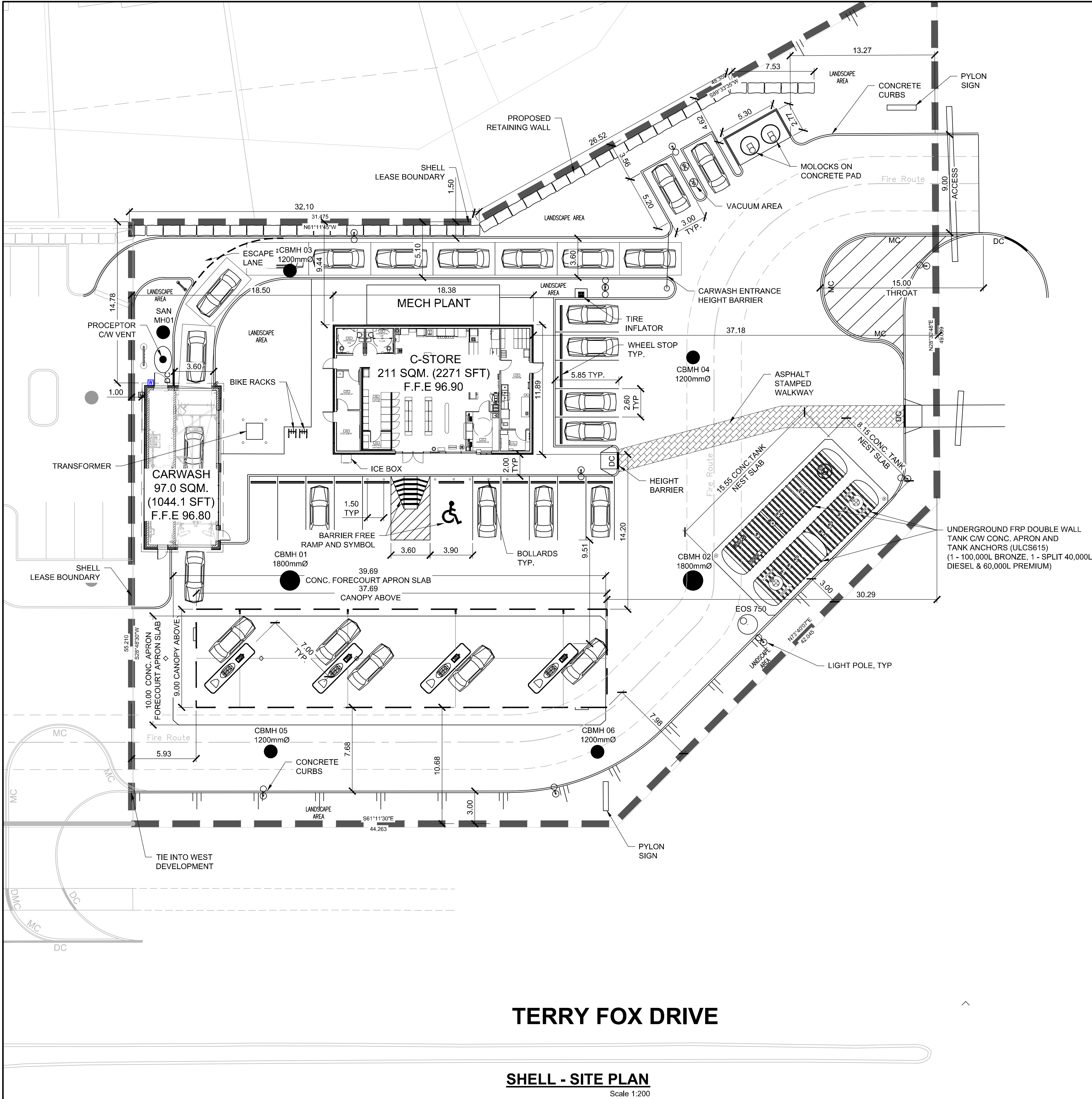
**AECOM FILE NAME**

C100.0-ESC-HEH

**SHEET NUMBER**

C100.0

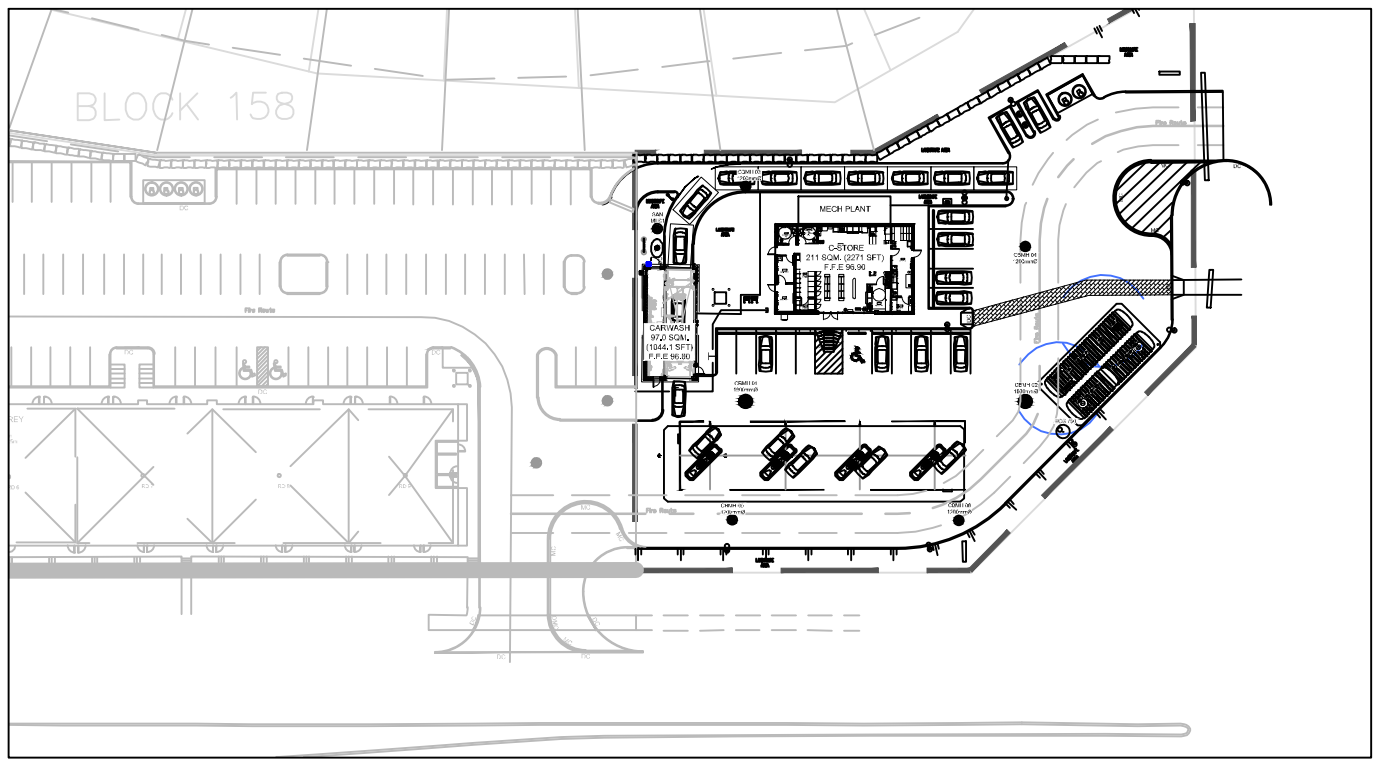
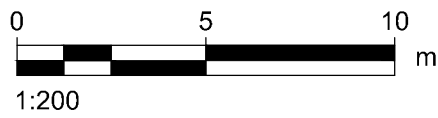




## TERRY FOX DRIVE

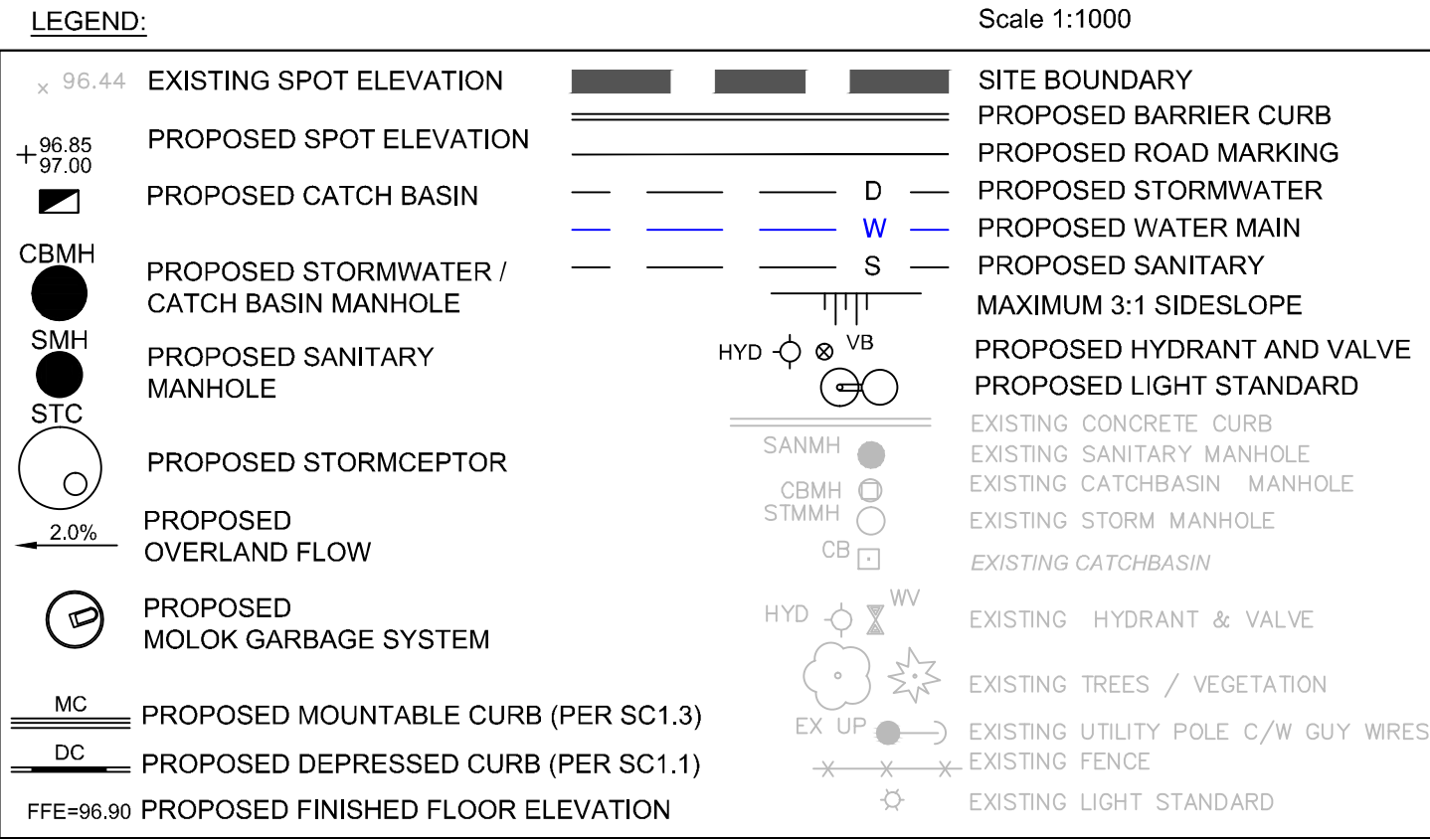
### SHELL - SITE PLAN

Scale 1:200



### DEVELOPMENT - SITE PLAN

Scale 1:1000



SITE STATISTICS			
DATA		REQUIRED	PROVIDED
ZONING	Local Commercial Zone, Subzone 7 with a special exception 411 (LC7[411])		
TOTAL C-STORE AREA (sq.m)		300.00m² max	211.00m² - (GLA = 84m²)
TOTAL CARWASH AREA (sq.m)			97.00m² - (GLA = 54m²)
TOTAL CANOPY AREA (sq.m)		N/A	299.52 sq.m
SETBACKS			
FRONT YARD (TERRY FOX DRIVE)	10m		10.68m
SIDE YARD (KATANA AVENUE)	11.5m		30.29m
INTERIOR SIDE YARD (WEST PROPERTY LINE)	NA		1.0m
REAR YARD (NORTH PROPERTY LINE)	5.0m		9.44m
TOTAL LANDSCAPE AREA	15 % OF SITE AREA		21.5%
TOTAL LANDSCAPE AREA (sq.m)	620.64 sq.m		889.00 sq.m
TOTAL HARDSCAPE AREA (sq.m)	N/A		3248.61 sq.m
NET LOT AREA (sq.m)	4000 sq.m MIN.		4137.61 sq.m
BUILDING HEIGHT	12.5m MAX		NOT SPECIFIED
CARWASH STACKING	10		10
LOADING SPACES			
Spaces	N/A		N/A
Size	N/A		N/A
PARKING		REQUIRED	PROVIDED
Barrier-Free Access Parking			
Spaces	0		1
Stall Length	SAME AS OTHER SPACES		5.85m
Stall Width	3.66m		3.9m
Standard Parking			
Spaces	7		15
Stall Length	5.2m		5.85m
Stall Width	2.6m		2.6m
Overall Number of Spaces	7		16
Aisle Width	6.7m		9.0m
Bicycle Parking	0		6
Land Use Bylaw Summary:			
Lands to North: Parks and Open Space Zone 1 with special exception 1616 (O1[1616])			
Lands to South: Parks and Open Space Zone 1 (O1)			
Lands to East: Local Commercial Zone with a special exception 1706, and a maximum height limit of 11m (LC[1706] H (11))			
Lands to West: Local Commercial Zone, Subzone 7 with a special exception 411 (LC7[411])			

# AECOM

#### PROJECT

## Shell Canada Projects HERITAGE HILLS Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

#### CLIENT

### Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

#### CONSULTANT

AECOM Canada Ltd.  
Fourth Floor, 3292 Production Way  
Burnaby, British Columbia V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



Jan 31, 2019

#### REGISTRATION

#### LEGAL DESCRIPTION

BLOCK 170, PLAN 4M-1413

#### ISSUE/REVISION

D	2019.02.01	ISSUED FOR SPA
C	2018.10.29	ISSUED FOR REVIEW
B	2018.08.21	ISSUED FOR REVIEW
A	2018.08.14	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

#### KEY PLAN

#### PROJECT NUMBER

60546152

#### SHEET TITLE

SITE PLAN

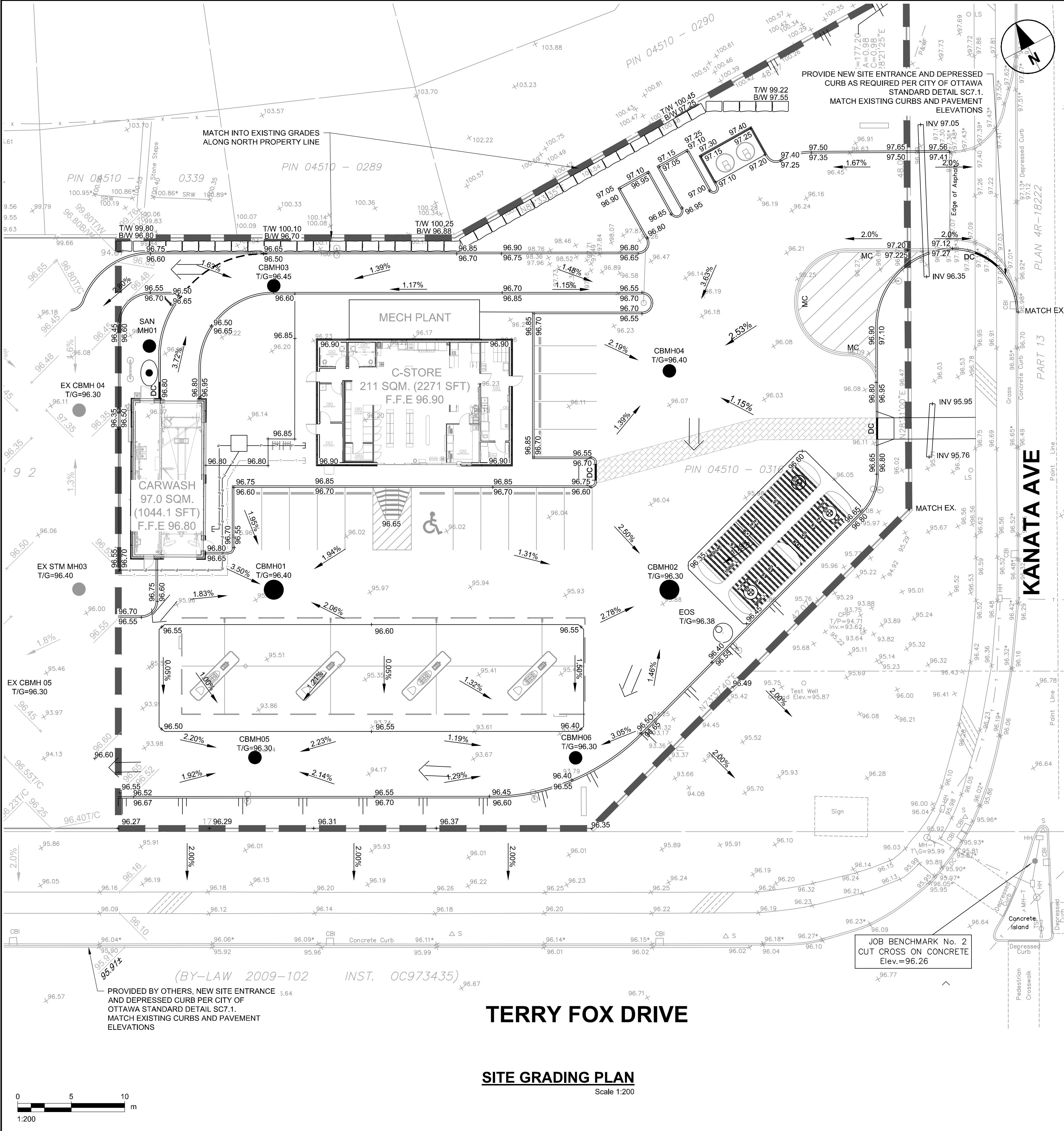
#### AECOM FILE NAME

C101.0-SIP-HEH

#### SHEET NUMBER

## C101.0





**LEGEND:**

× 96.44	EXISTING SPOT ELEVATION	— — — — —	SITE BOUNDARY
+ 96.85 97.00	PROPOSED SPOT ELEVATION	— — — — —	PROPOSED BARRIER CURB
■	PROPOSED CATCH BASIN	— — — — —	PROPOSED ROAD MARKING
●	PROPOSED STORMWATER / CATCH BASIN MANHOLE	— — — — —	PROPOSED STORMWATER
●	PROPOSED SANITARY MANHOLE	— — — — —	PROPOSED WATER MAIN
○	PROPOSED STORMCEPTOR	— — — — —	PROPOSED SANITARY
○	PROPOSED OVERLAND FLOW	— — — — —	MAXIMUM 3:1 SIDESLOPE
○	PROPOSED MOUNTABLE CURB (PER SC1.3)	— — — — —	PROPOSED HYDRANT AND VALVE
○	PROPOSED DEPRESSED CURB (PER SC1.1)	— — — — —	PROPOSED LIGHT STANDARD
○	PROPOSED FINISHED FLOOR ELEVATION	— — — — —	EXISTING CONCRETE CURB
←	EMERGENCY OVERLAND FLOW	— — — — —	EXISTING SANITARY MANHOLE
		— — — — —	EXISTING CATCHBASIN MANHOLE
		— — — — —	EXISTING STORM MANHOLE
		— — — — —	EXISTING CATCHBASIN
		— — — — —	EXISTING HYDRANT & VALVE
		— — — — —	EXISTING TREES / VEGETATION
		— — — — —	EXISTING UTILITY POLE C/W GUY WIRES
		— — — — —	EXISTING FENCE
		— — — — —	EXISTING LIGHT STANDARD



PROJECT

Shell Canada Projects  
HERITAGE HILLS  
Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

CONSULTANT

AECOM Canada Ltd.  
Fourth Floor, 3292 Production Way  
Burnaby, British Columbia V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



Jan 31, 2019

REGISTRATION

ISSUE/REVISION

ISSUE	DATE	DESCRIPTION
B	2019.02.01	ISSUED FOR SPA
A	2018.12.06	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60546152

SHEET TITLE

SITE GRADING PLAN

AECOM FILE NAME

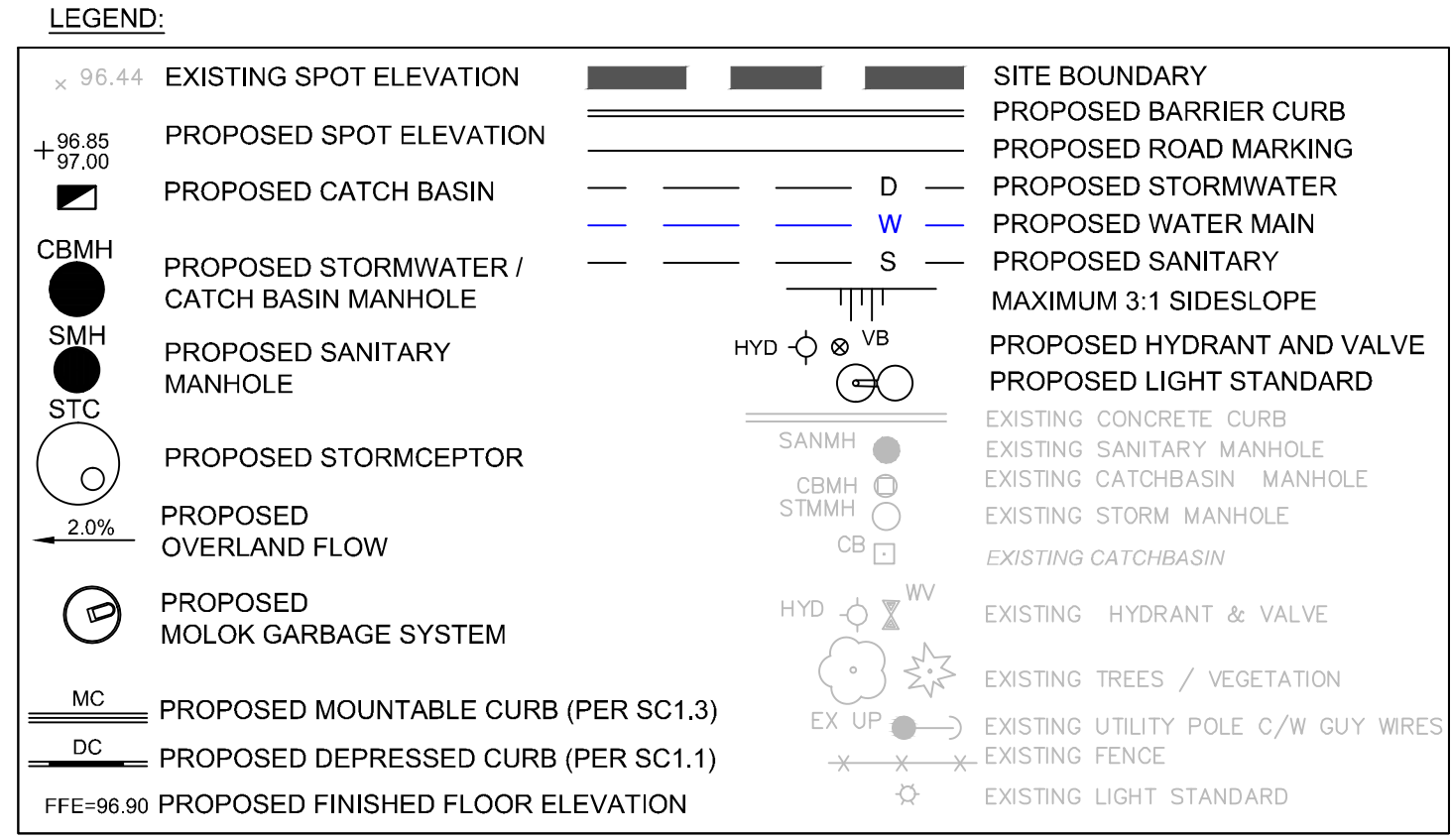
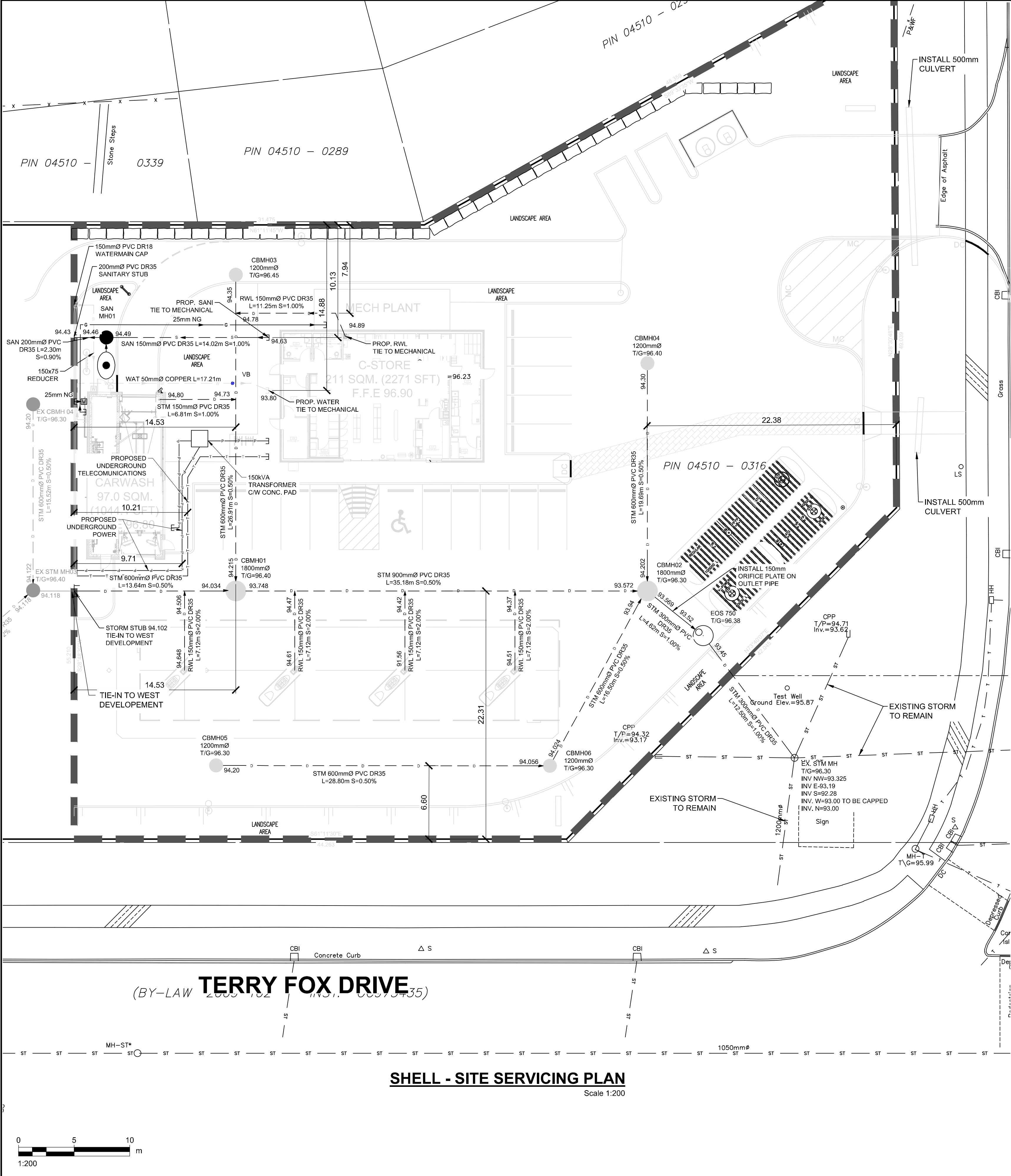
C102.0-GRD-HEH

SHEET NUMBER

C102.0



ANSI D 864mm x 559mm  
Approved: \_\_\_\_\_  
Checked: \_\_\_\_\_  
Designer: \_\_\_\_\_  
Project Management Initials: \_\_\_\_\_  
Last saved by: OSBORNE(2019.01.31) Last Plotter: 2019.01.31  
Filename: P:\052684400\TECHNICAL\3\NTISHERTAGE HILLS, KANATA, NTI02 FRONT END DEVELOPMENT\2.2 DESIGN DEVELOPMENT PLANS AND SPECS\910-CAD\20-SHEETS\C103.0 SITE SERVICING PLAN.DWG



\*\*TOTAL WATER FLOW REQUIRED IS  
110gpm FOR THE 150mm WATER METER

SHELL/ HERITAGE HILLS/ OTTAWA	
SANITARY DRAINAGE FOR C-STORE	
FIXTURES	LOAD
WATER CLOSET	2X6 = 12
LAVATORY	2X1 = 2
MOP SINK	1X3 = 3
TRIPLE SINK	1X3 = 3
HAND SINK	2X2 = 4
DISHWASHER	1X3 = 3
FLOOR DRAIN	4X3 = 12
HUB DRAIN	6X1.5 = 9
	48 F.U. = ±50GPM
4"Ø PIPE @ 1% SLOPE GOOD FOR 180 F.U.	
.USE 6"Ø PIPE LEAVING BUILDING	

### GENERAL NOTES

- THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES, STRUCTURES AND APPURTENANCES IS TO BE CONFIRMED. THE CONTRACTOR SHALL DETERMINE AT THE TIME OF CONSTRUCTION THE POSSIBILITIES OF UTILIZING ALL SUCH UTILITIES, STRUCTURES AND APPURTENANCES. THE CONTRACTOR SHALL INFORM AND SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES, STRUCTURES AND APPURTENANCES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES AND MUNICIPAL SERVICES (WATER, SANITARY & STORM) DURING CONSTRUCTION. ALL EXISTING INVERTS AND ELEVATIONS MUST BE VERIFIED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES MUST BE REPORTED TO AECOM LTD.

# AECOM

### PROJECT

Shell Canada Projects  
HERITAGE HILLS  
Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

### CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca

### CONSULTANT

AECOM Canada Ltd.  
Fourth Floor, 3292 Production Way  
Burnaby, British Columbia V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



### REGISTRATION

LEGAL DESCRIPTION  
BLOCK 170, PLAN 4M-1413

### ISSUE/REVISION

NO.	DATE	DESCRIPTION
B	2019.02.01	ISSUED FOR SPA
A	2018.12.06	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

### KEY PLAN

### PROJECT NUMBER

60546152

### SHEET TITLE

SITE SERVICING PLAN

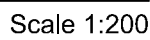
### AECOM FILE NAME

C103.0-SSP-HEH

### SHEET NUMBER

C103.0





## STORM WATER MANAGEMENT ANALYSIS SUMMARY

STORM FLOWS	
PREDEVELOPMENT SITE RELEASE RATE 5 YEAR STORM(L/SEC):	68.2
POST DEVELOPMENT PEAK FLOW 100 Year: (L/SEC)	
CONTROLLED AREA:	205.8
UNCONTROLLED AREA:	3.7
ALLOWABLE SITE RELEASE RATE IN 100 YEAR STORM(L/SEC):	64.6

DETENTION STORAGE VOLUME CALCULATIONS	
100-YR REQUIRED DETENTION STORAGE VOLUME (CU.M):	86.6
MAXIMUM SITE DETENTION STORAGE AVAILABLE (CU.M):	
DESIGN T.W.L.:	96.300
SURFACE PONDING:	0
PIPE STORAGE:	61.88
MH/CB STORAGE	30.70
	92.58
TOTAL	


  
 Jan 31, 2019

## REGISTRATION

ISSUE/REVISION		
B	2019.02.01	ISSUED FOR SPA
A	2018.12.06	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

## KEY PLAN

PROJECT NUMBER

**SHEET TITLE**

# STORMWATER MANAGEMENT PLAN

AECOM FILE NAME

**SHEET NUMBER**

# C104.0

## PROJECT

Shell Canada Projects  
HERITAGE HILLS  
Kanata (NTI)

471 Terry Fox Drive  
Ottawa, Ontario

**CLIENT**

# Shell Canada

400-4th Avenue SW

Calgary, AB T2P

403.252.4554 tel

[www.shell.ca](http://www.shell.ca)

**CONSULTANT**

AECOM Canada Ltd.

Fourth Floor, 3292 Production Way

Burnaby, British Columbia V5A 4R4  
 604-444-2422 ext. 222 604-291-2527

604.444.6400 tel 604.294.8597 fax  
www.2020cm.com

SITE CATCHMENT AREA (HA):	0.526
CONTROLLED AREA (HA):	0.496
UNCONTROLLED AREA (HA):	0.030

STORM FLOWS	
PREDEVELOPMENT SITE RELEASE RATE 5 YEAR STORM(L/SEC):	68.2
POST DEVELOPMENT PEAK FLOW 100 Year: (L/SEC)	
CONTROLLED AREA:	205.8
UNCONTROLLED AREA:	3.7
ALLOWABLE SITE RELEASE RATE IN 100 YEAR STORM(L/SEC):	64.6

### SITE ORIFICE CONTROL

LOCATION:	CBMH02
ORIFICE PLATE DIA: (mm)	150
INVERT ELEVATION: (m)	94.169
CENTER-LINE ELEV: (m)	94.244
DOWNSTREAM HGL: (m)	94.244
DETENTION STORAGE TWL: (m)	96.300
DESIGN HEAD: (m)	2.056
MAXIMUM RELEASE RATE 100 Year (L/SEC):	68.5

### DETENTION STORAGE VOLUME CALCULATIONS

100-YR REQUIRED DETENTION STORAGE VOLUME (CU.M):	86.6
MAXIMUM SITE DETENTION STORAGE AVAILABLE (CU.M):	
DESIGN T.W.L:	96.300
SURFACE PONDING:	0
PIPE STORAGE:	61.88
MH/CB STORAGE	30.70
	92.58
	TOTAL

## ISSUE/REVISION

B	2019.02.01	ISSUED FOR SPA
A	2018.12.06	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

## KEY PLAN

**PROJECT NUMBER**

60546152

**SHEET TITLE**

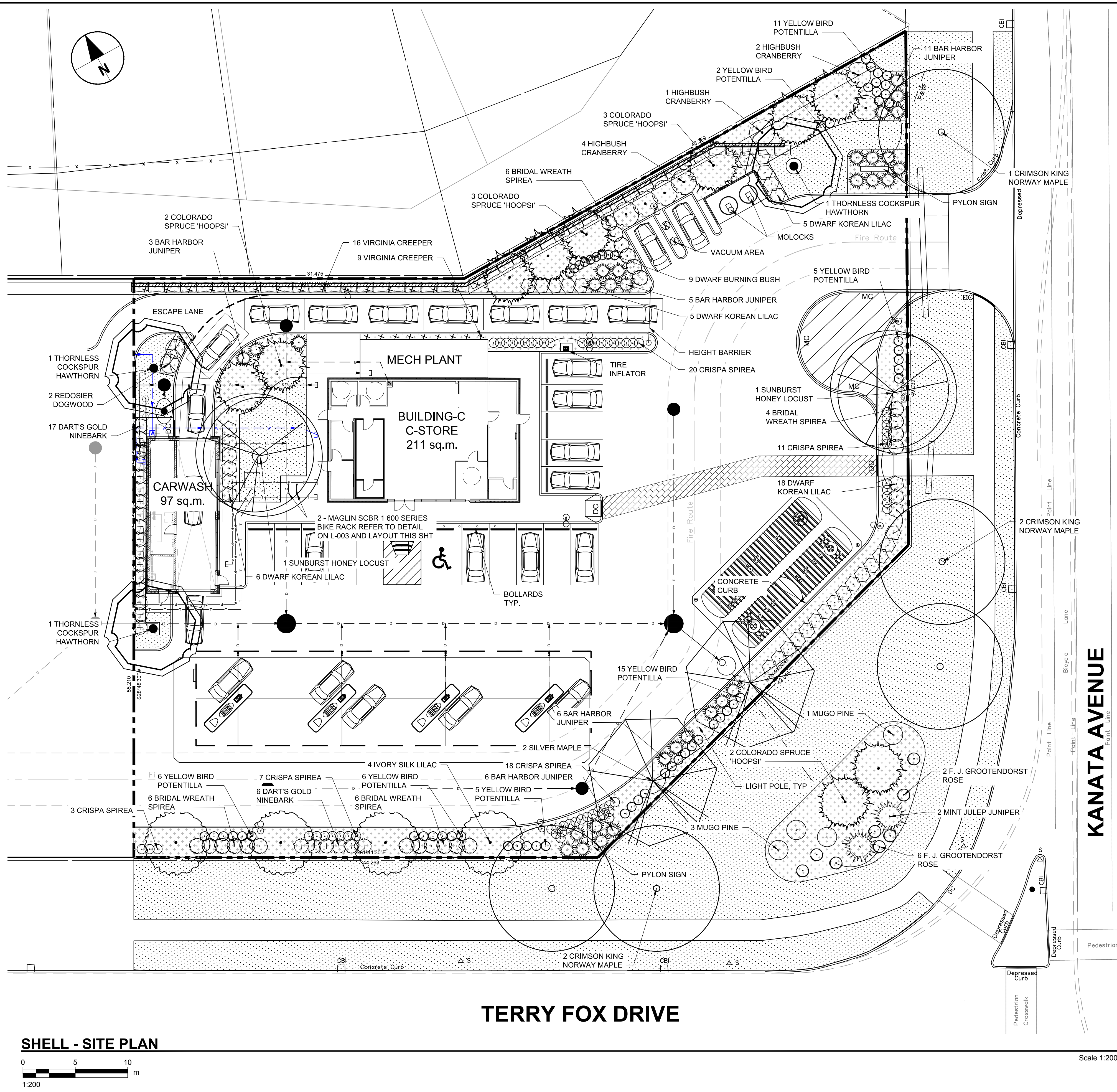
# STORMWATER MANAGEMENT PLAN

**AECOM FILE NAME**

C104.0-SWM-HEH

**SHEET NUMBER**




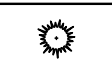




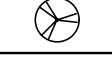
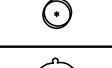
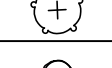
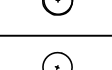
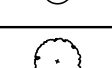
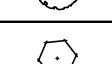
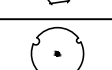

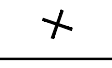




## NTS












## SCHEDULE A - Shell Site

Sym	Qty	Unit	Botanical Name	Common Name	Size/Remarks
Coniferous Trees					
	8	EACH	<i>Picea pungens</i> 'Hoopsi'	COLORADO SPRUCE 'HOOPS'	1800 mm HEIGHT, SPACED AT 4.5 m O.C.
Coniferous Shrubs					
	31	EACH	<i>Juniperus horizontalis</i> 'Bar Harbor'	BAR HARBOR JUNIPER	SPREAD 600 mm, SPACED AT 1.5 m O.C.
Deciduous Trees					
	2	EACH	<i>Acer saccharinum</i>	SILVER MAPLE	70 mm CALIPER, SINGLE STEM, SPACED AT 15 m O.C.
	3	EACH	<i>Crataegus crusgalli</i> 'Inermis'	THORNLESS COCKSPUR HAWTHORN	60 mm CAL SINGLE STEM
	2	EACH	<i>Gleditsia triacanthos</i> 'Sunburst'	SUNBURST HONEY LOCUST	70 mm CALIPER, SINGLE STEM
	4	EACH	<i>Syringa reticulata</i> 'Ivory Silk'	IVORY SILK LILAC	60 mm CALIPER, SINGLE STEM, SPACED AT 10 m O.C.
Deciduous Shrubs					
	2	EACH	<i>Cornus stolonifera</i>	REDOSIER DOGWOOD	600 mm HEIGHT, SPACED AT 1.5 m O.C.
	9	EACH	<i>Euonymus nanus</i> 'Turkestanicus'	DWARF TURKESTAN BURNING BUSH	600 mm HEIGHT, SPACED AT 0.6 m O.C.
	23	EACH	<i>Physocarpus opulifolius</i> 'Darts Gold'	DARTS GOLD NINEBARK	600 mm HEIGHT, SPACED AT 1.2 m O.C.
	50	EACH	<i>Potentilla fruticosa</i> 'Yellowbird'	YELLOWBIRD POTENTILLA	600 mm HEIGHT, SPACED AT 0.75 m O.C.
	59	EACH	<i>Spiraea japonica</i> 'crispa'	CRISPA SPIREA	600 mm HEIGHT, SPACED AT 0.75 m O.C.
	22	EACH	<i>Spiraea prunifolia</i>	BRIDAL WREATH SPIREA	600 mm HEIGHT, SPACED AT 1.5 m O.C.
	34	EACH	<i>Syringa meyeri</i>	DWARF KOREAN LILAC	600 mm HEIGHT, SPACED AT 1.25 m O.C.
	7	EACH	<i>Viburnum trilobum</i> 'Andrews'	HIGHBUSH CRANBERRY ANDREWS	750 mm HEIGHT, SPACED AT 2.0 m O.C.
Vines and Perennials					
	25	EACH	<i>Parthenocissus virginiana</i>	VIRGINIA CREEPER	#1 CONTAINER, 600mm HT. - MIN 4 CANES
Miscellaneous Materials					
	165	m <sup>2</sup>	SOD OVER 150 mm DEPTH TOPSOIL		TOPSOIL TO BE IMPORTED AND AMEND AS REQUIRED TO CITY OF OTTAWA STANDARDS
	750	m <sup>2</sup>	DECIDUOUS SHREDDED WOOD CHIP MULCH - 75 mm DEPTH		

## SCHEDULE B - Boulevard Plantings

Sym	Qty	Unit	Botanical Name	Common Name	Size/Remarks
Coniferous Trees					
	2	EACH	<i>Picea pungens</i> 'Hoopsi'	COLORADO SPRUCE 'HOOPSI'	1800 mm HEIGHT, SPACED AT 4.5 m O.C.
Coniferous Shrubs					
	2	EACH	<i>Juniperus x Pfitzeriana</i> 'Mint Julep'	MINT JULEPJUNIPER	600 mm HEIGHT
	4	EACH	<i>Pinus mugo pumilio</i>	MUGO PINE	600 mm HEIGHT
Deciduous Trees					
	5	EACH	<i>Acer platanoides</i> 'Crimson King'	NORWAY MAPLE 'CRIMSON KING'	70 mm CALIPER, SINGLE STEM, SPACED AT 10 m O.C.
Deciduous Shrubs					
	8	EACH	<i>Rosa rugosa</i> 'F. J. Grootendorst'	F. J. GROOTENDORST ROSE	
Miscellaneous Materials					
	1395	m <sup>2</sup>	SOD OVER 150 mm DEPTH TOPSOIL		TOPSOIL TO BE IMPORTED AND AMEND AS REQUIRED TO CITY OF OTTAWA STANDARDS
	135	m <sup>2</sup>	DECIDUOUS SHREDDED WOOD CHIP MULCH - 75 mm DEPTH		



## PROJECT

# Shell Canada Projects Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

## CLIENT

# Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

[www.shell.ca](http://www.shell.ca)

## CONSULTANT

AECOM Canada Ltd.

Fourth Floor, 3292 Production Way

Burnaby, British Columbia V5A 4R4  
604 444 6400 tel 604 304 8501

[www.aecom.com](http://www.aecom.com)



## REGISTRATION

## LEGAL DESCRIPTION

BLOCK 170, PLAN 4M-1413

## ISSUE/REVISION

C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.09.07	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

## KEY PLAN

## PROJECT NUMBER

60546152

**SHEET TITLE**

## PLANTING LIST

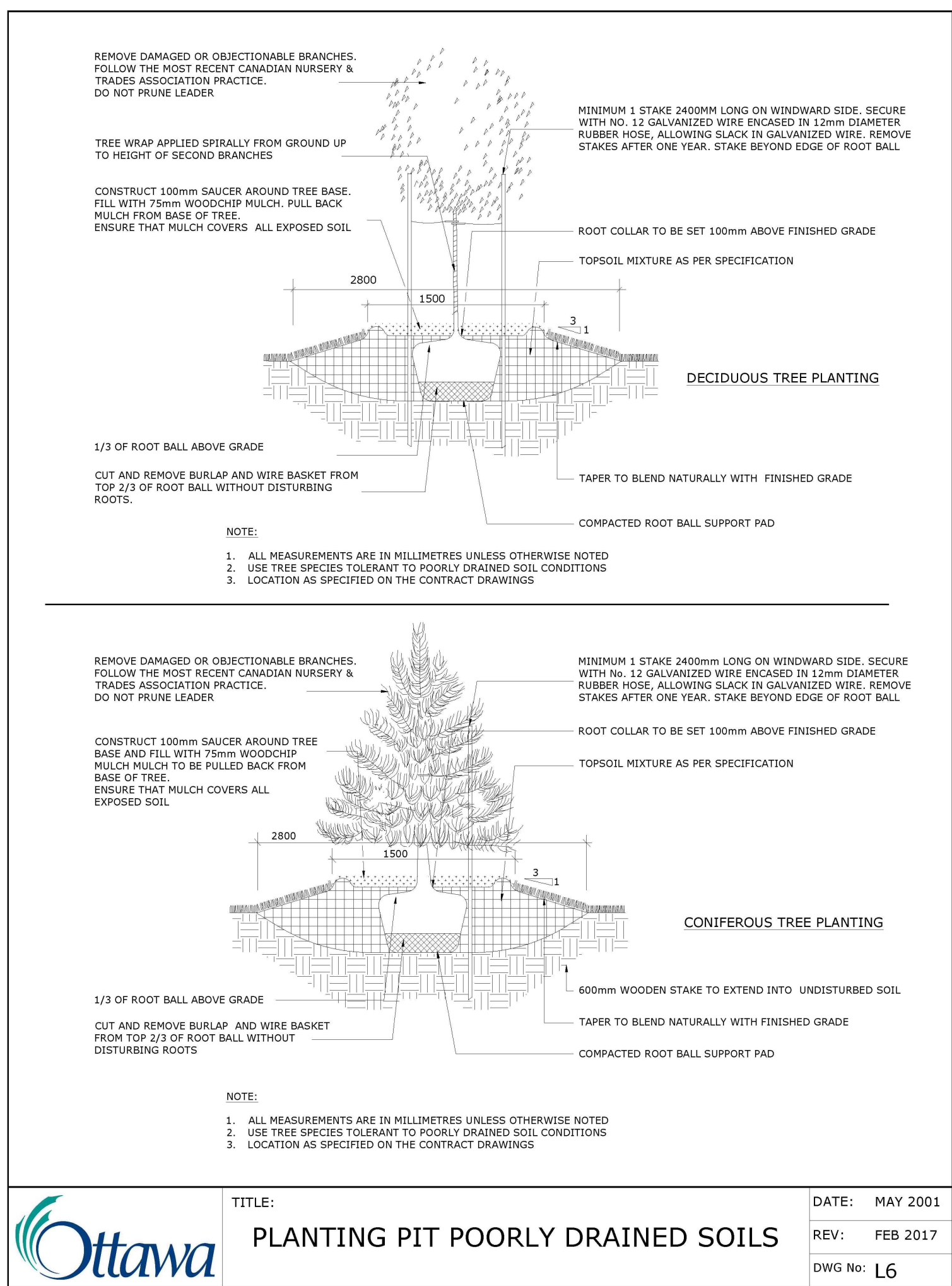
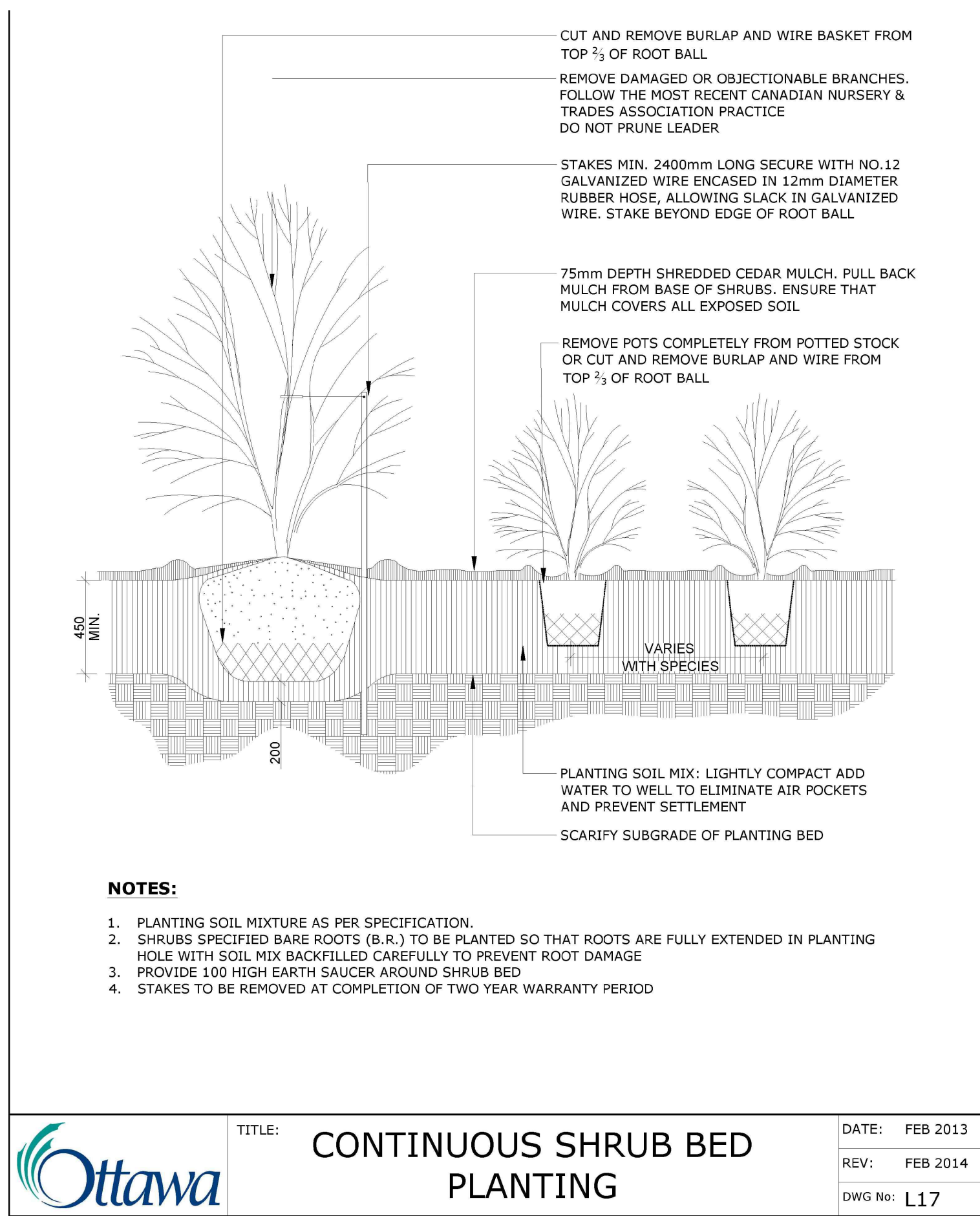
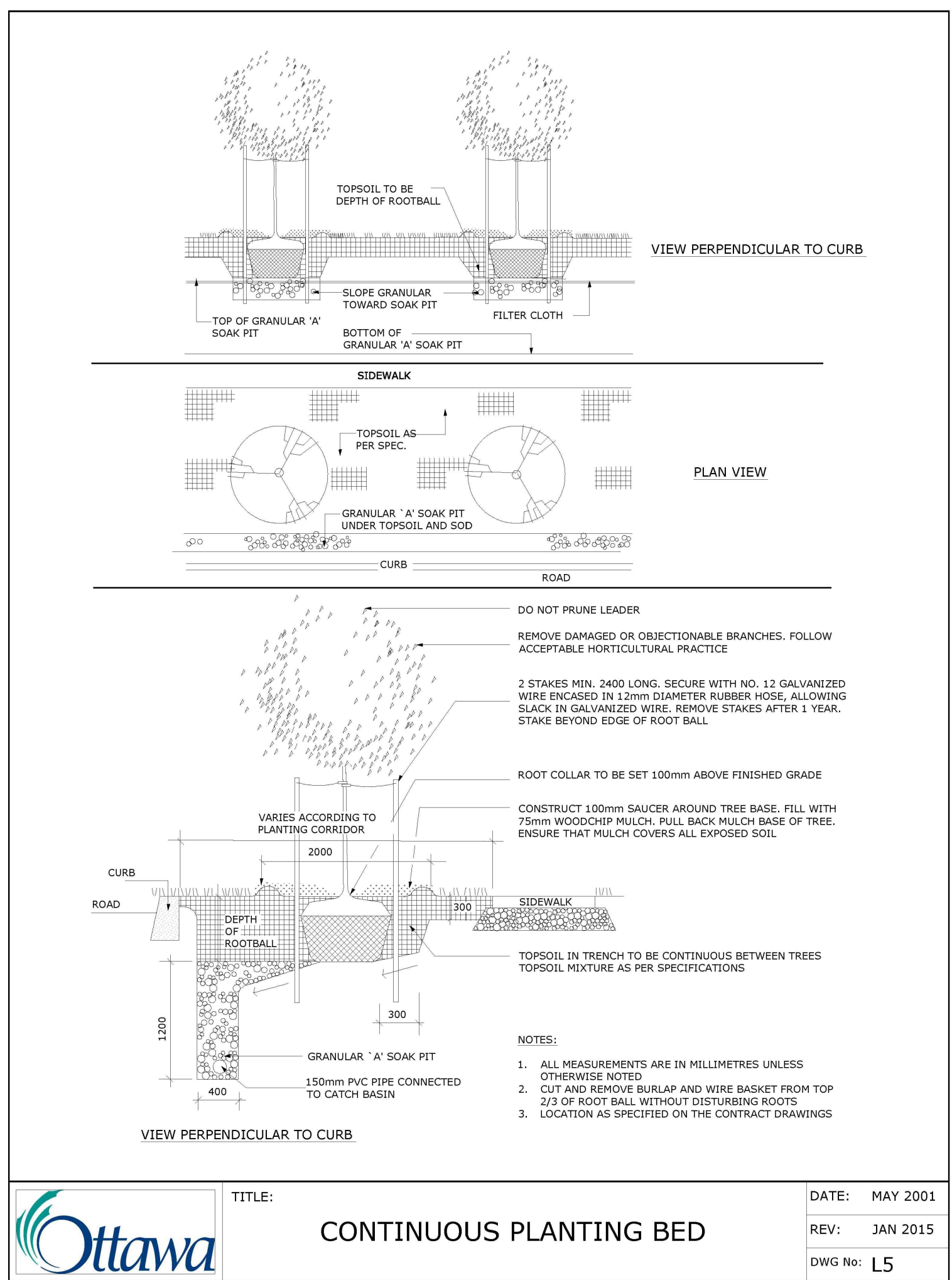
**AECOM FILE NAME**

L501.0-LND-HEH

**SHEET NUMBER**

# L501.0





BIKE RACKS

# MAGLIN™

T 800-716-5506  
F 877-260-9393  
WWW.MAGLIN.COM  
SALES@MAGLIN.COM

## SCBR | 600 SERIES

**MATERIALS:** The Bike Rack is made from solid cast aluminum.

**FINISH:** The Maglin Powdercoat System provides a durable finish on all metal surfaces.

**INSTALLATION:** The bike rack is delivered pre-assembled. It is available with either a surface mount or direct burial installation option.

**TO SPECIFY:** Select SCBR1600 Series

Choose:

- Base Type

- Direct Burial (SCBR1600-DB)

- Surface Mount (SCBR1600-S)

- Powdercoat Color

COLOUR TO BE MATTE GUNMETAL

**COMPLEMENTARY PRODUCTS:**

- SCTB1600

- SCB1600B

- SCRC1603

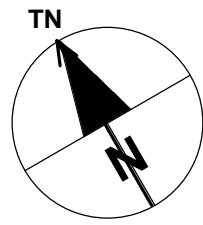
\*SCBR1600-S surface mount model shown.

### DIMENSIONS:

Length:	27.62" (70.17 cm)
Height:	25.19" (63.98 cm)
Width:	3.375" (8.57 cm)
Weight:	18.3lbs (8.3kg.)

All drawings, specifications, design and details on this page remain the property of Maglin Site Furniture Inc. and may not be used without Maglin authorization.  
Details and specifications may vary due to continuing improvements of our products.





**AECOM**

Canada Architects LTD.

PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com

CONSULTANTS

AECOM Canada Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com



REGISTRATION

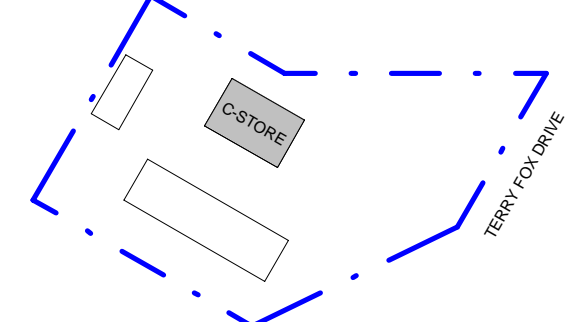
ISSUE/REVISION

IR	DATE	DESCRIPTION
C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.04	ISSUED FOR REVIEW

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

C-STORE

EQUIPMENT LAYOUT

AECOM FILE NAME

A101.1-EQP-HEH

SHEET NUMBER

A101.1



1/31/2019 6:42:32 PM  
BIM 360/Shell Canada - Heritage Hills NTI60546152\_Shell A18 - Heritage Hills - C-Store - 211.rvt  
Printed on 100% Post-Consumer Recycled Content Paper  
Project Management Initials: Designer Checked: Checker Approved: Approver ANSI D 22"x34"



# AECOM

Canada Architects LTD.  
**PROJECT**  
Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario  
**CLIENT**  
Shell Canada  
400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel  
www.shell.ca  
**CONSULTANT**

AECOM Canada Architects Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

**CONSULTANTS**

AECOM Canada Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

ONTARIO ASSOCIATION OF ARCHITECTS

4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

**REGISTRATION**

**ISSUE/REVISION**

IR	DATE	DESCRIPTION
C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.04	ISSUED FOR REVIEW

**DRAWN BY**  
TF

**KEY PLAN**

**PROJECT NUMBER**  
60546152

**SHEET TITLE**  
C-STORE  
EXTERIOR ELEVATIONS

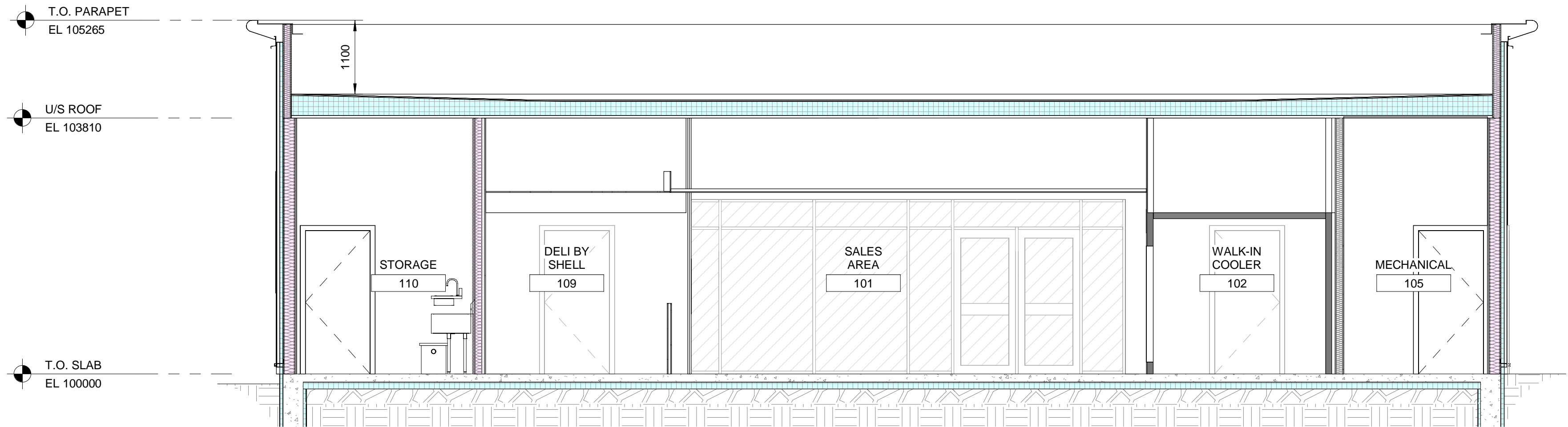
**AECOM FILE NAME**  
A201.1-EXE-HEH

**SHEET NUMBER**  
A201.1

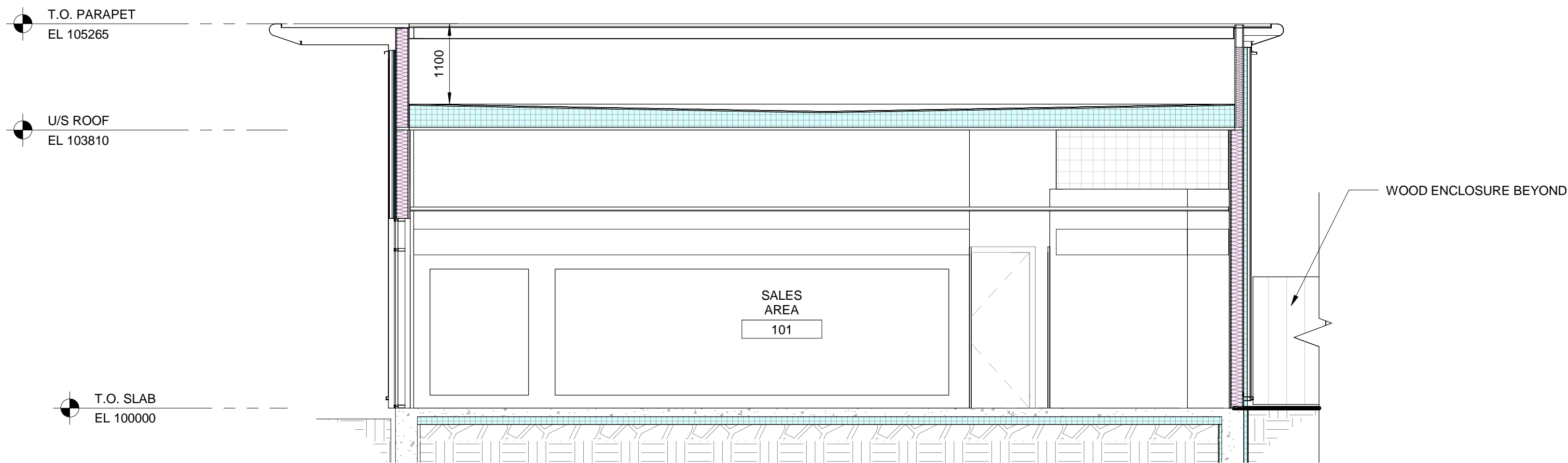
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

©2018 AECOM Corporation

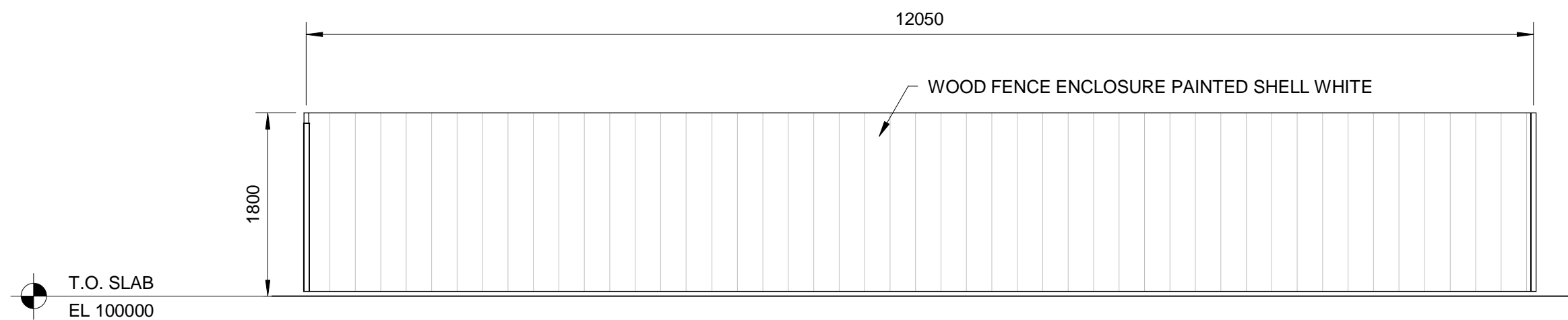




1 BUILDING SECTION  
A101.1 Scale: 1 : 50



2 BUILDING SECTION  
A101.1 Scale: 1 : 50



3 WOOD FENCE SECTION  
A101-1 Scale: 1 : 50

## Shell Canada Products Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

### Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com

CONSULTANTS

AECOM Canada Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel/604.294.8597 fax  
www.aecom.com



REGISTRATION

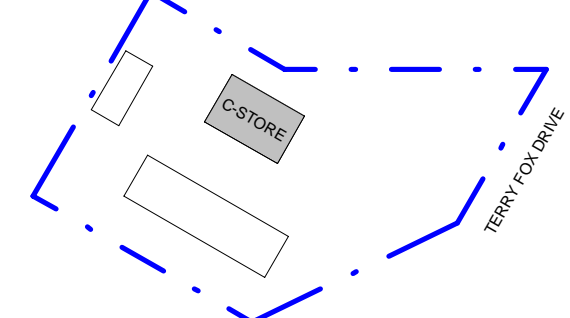
ISSUE/REVISION

IR	DATE	DESCRIPTION
A	2019.02.01	ISSUED FOR SPA

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

C-STORE

BUILDING SECTIONS

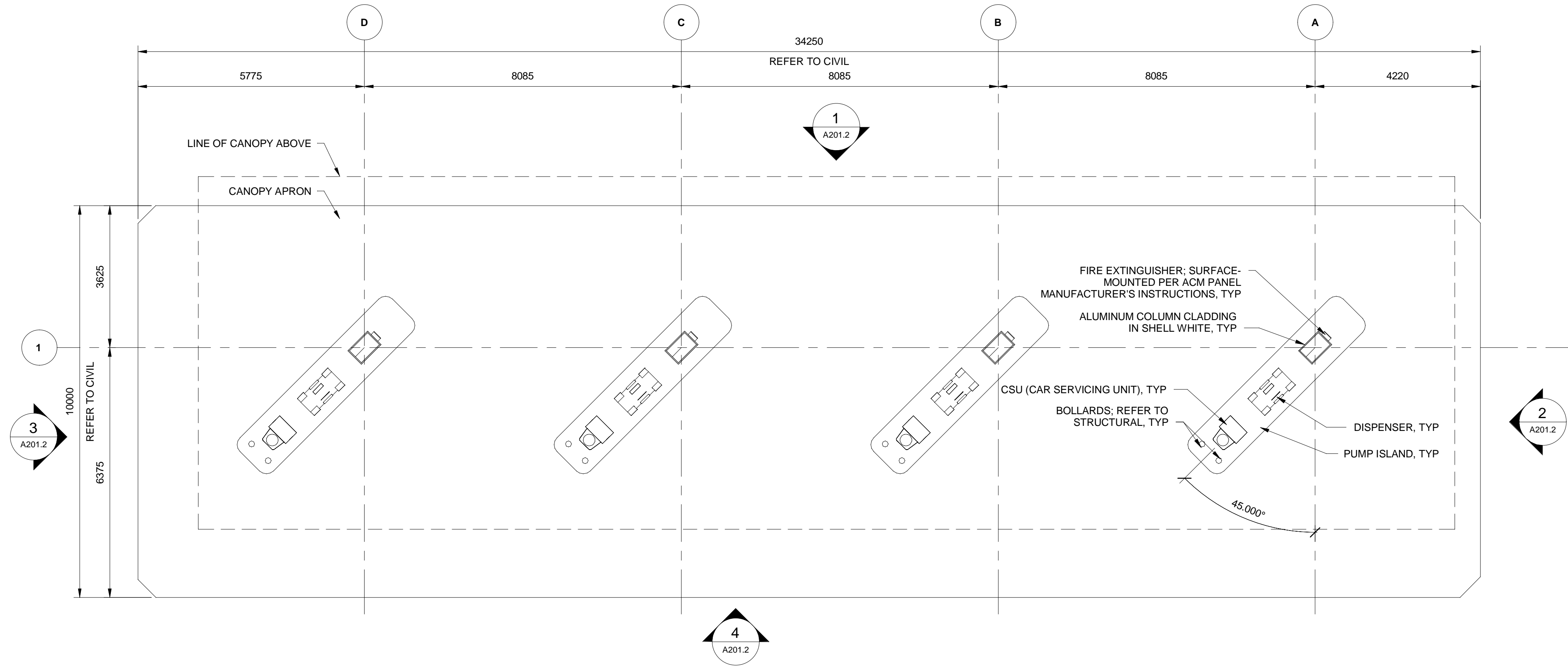
AECOM FILE NAME

A301.1-BUS-HEH

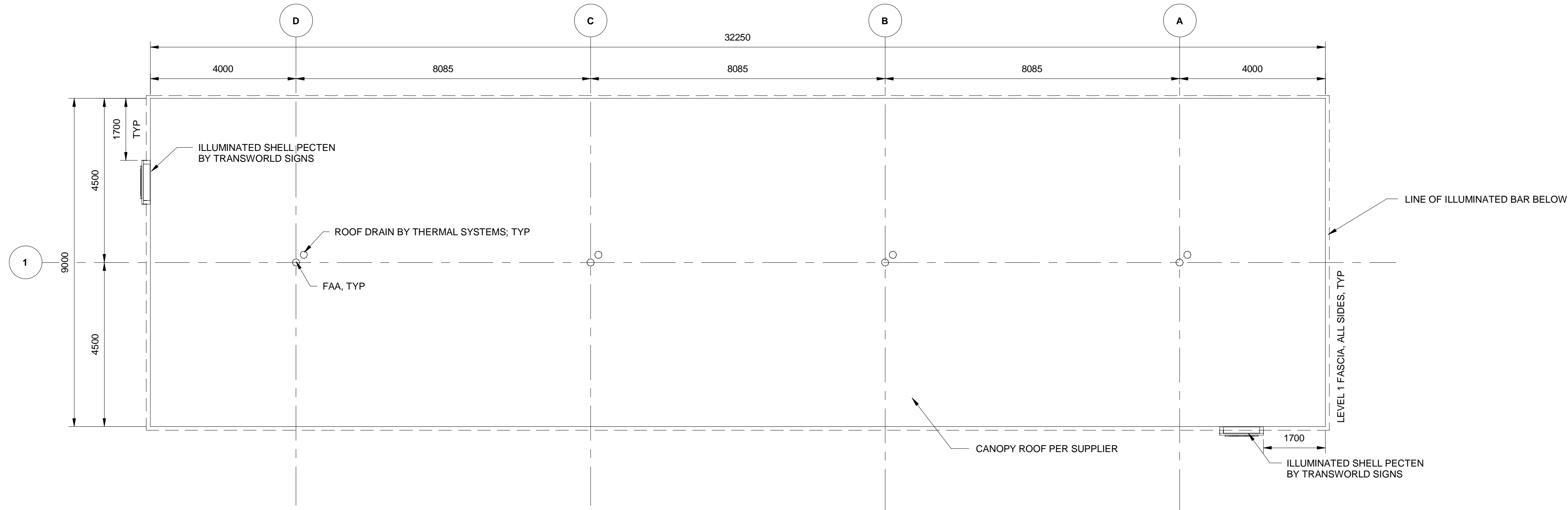
SHEET NUMBER

A301.1

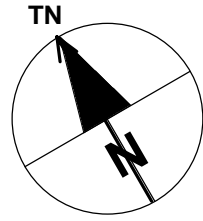




1 FUEL PUMP PLAN  
Scale: 1 : 75



2 ROOF PLAN  
Scale: 1 : 75



**AECOM**

Canada Architects LTD.

PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com

CONSULTANTS

AECOM Canada Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com



REGISTRATION

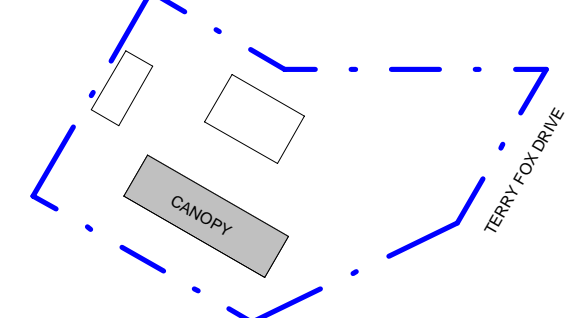
ISSUE/REVISION

IR	DATE	DESCRIPTION
C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.12	ISSUED FOR REVIEW

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

CANOPY

FUEL PUMP PLAN, ROOF PLAN

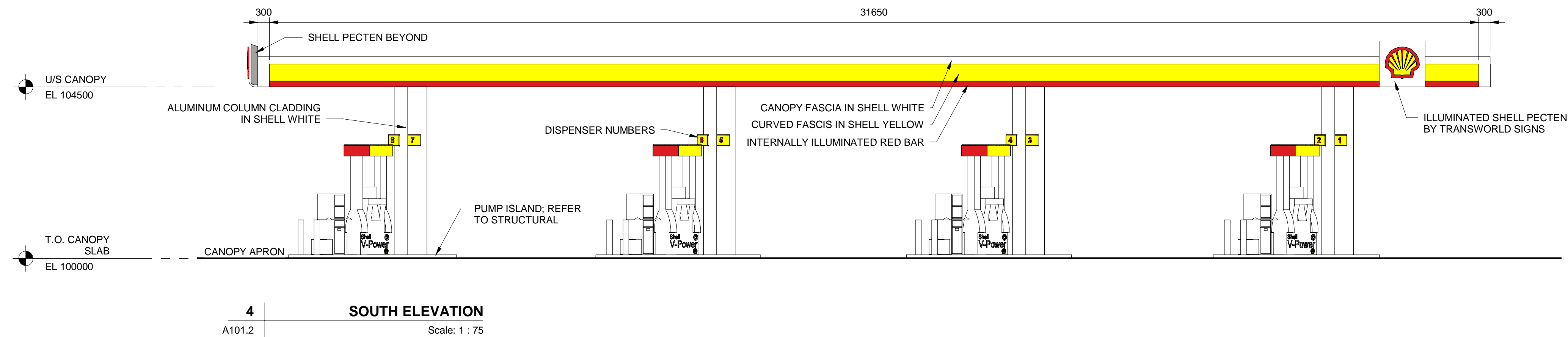
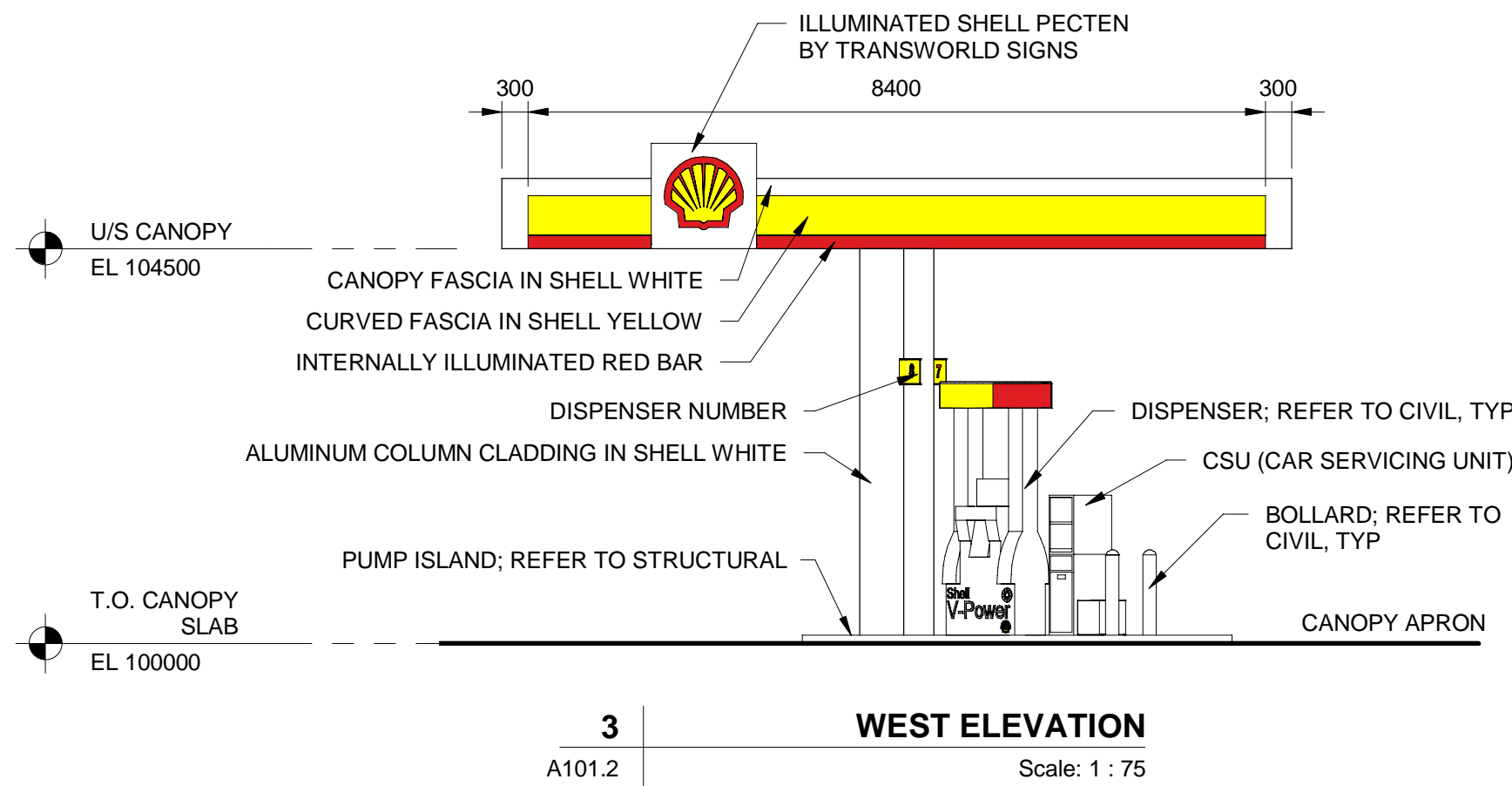
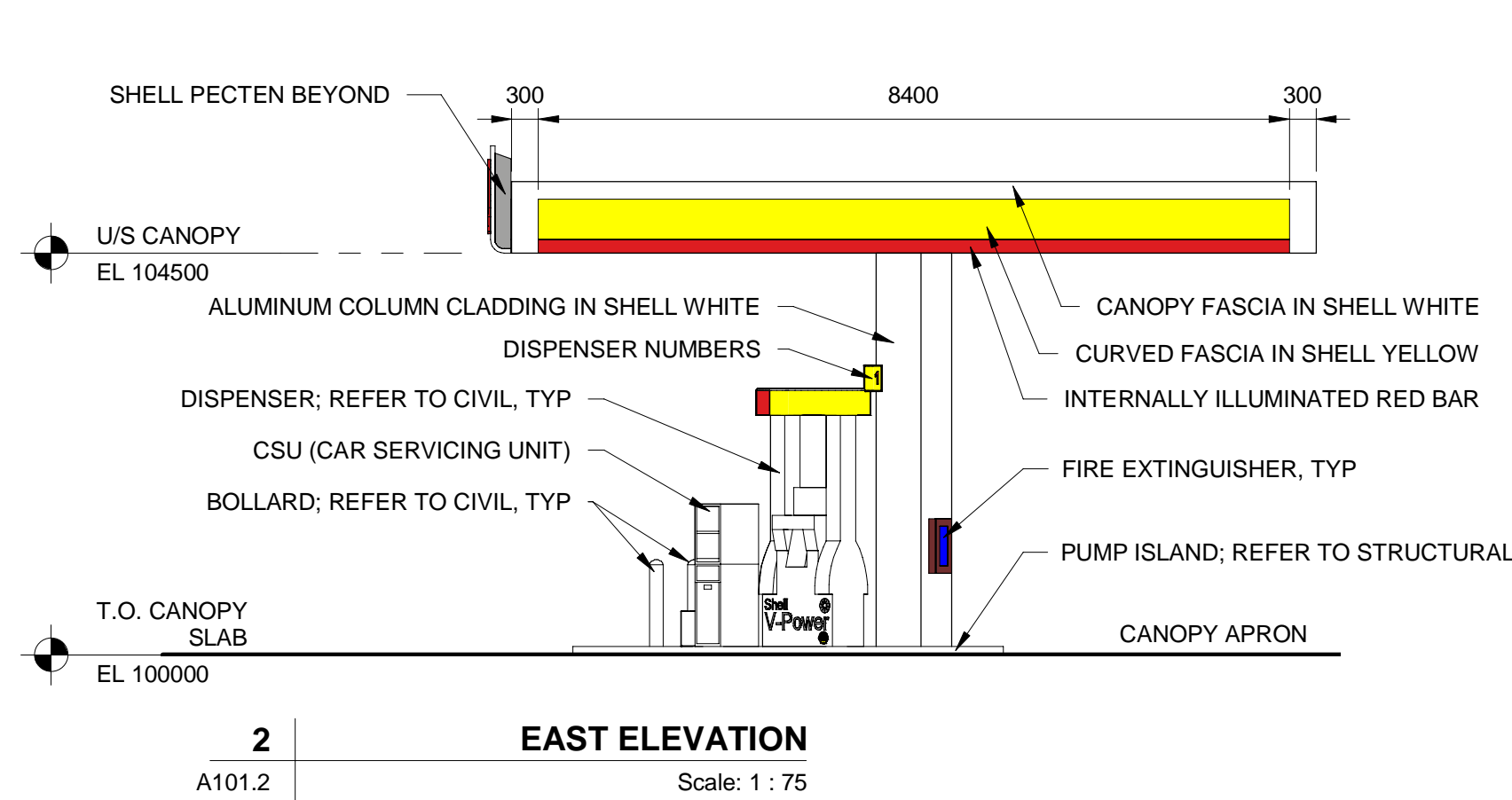
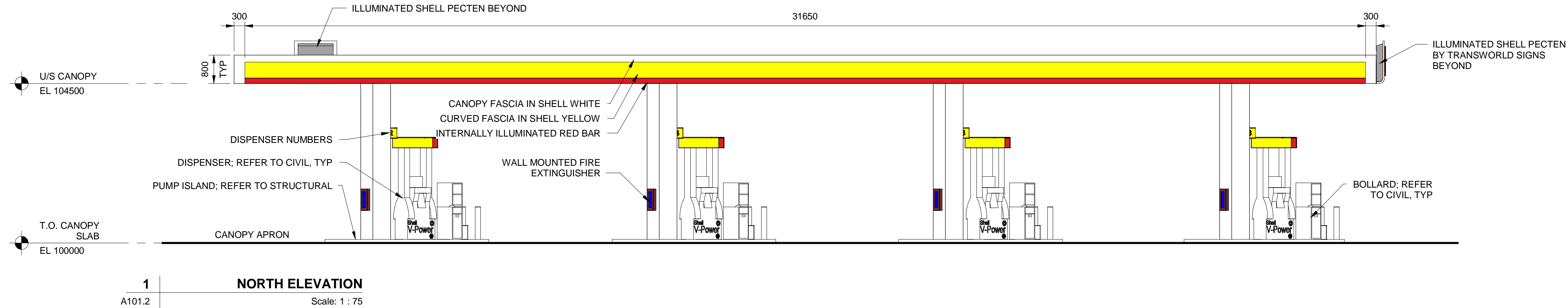
AECOM FILE NAME

A101.2-FPP-HEH

SHEET NUMBER

A101.2





## Shell Canada Products Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

### Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com

CONSULTANTS

AECOM Canada Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com



REGISTRATION

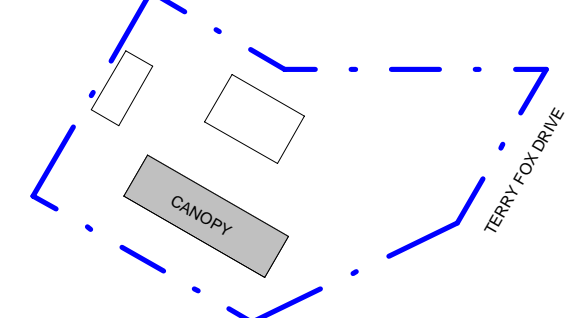
ISSUE/REVISION

IR	DATE	DESCRIPTION
C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.12	ISSUED FOR REVIEW

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

CANOPY

FUEL PUMP ELEVATIONS

AECOM FILE NAME

A201.2-EXE-HEH

SHEET NUMBER

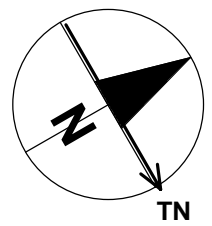
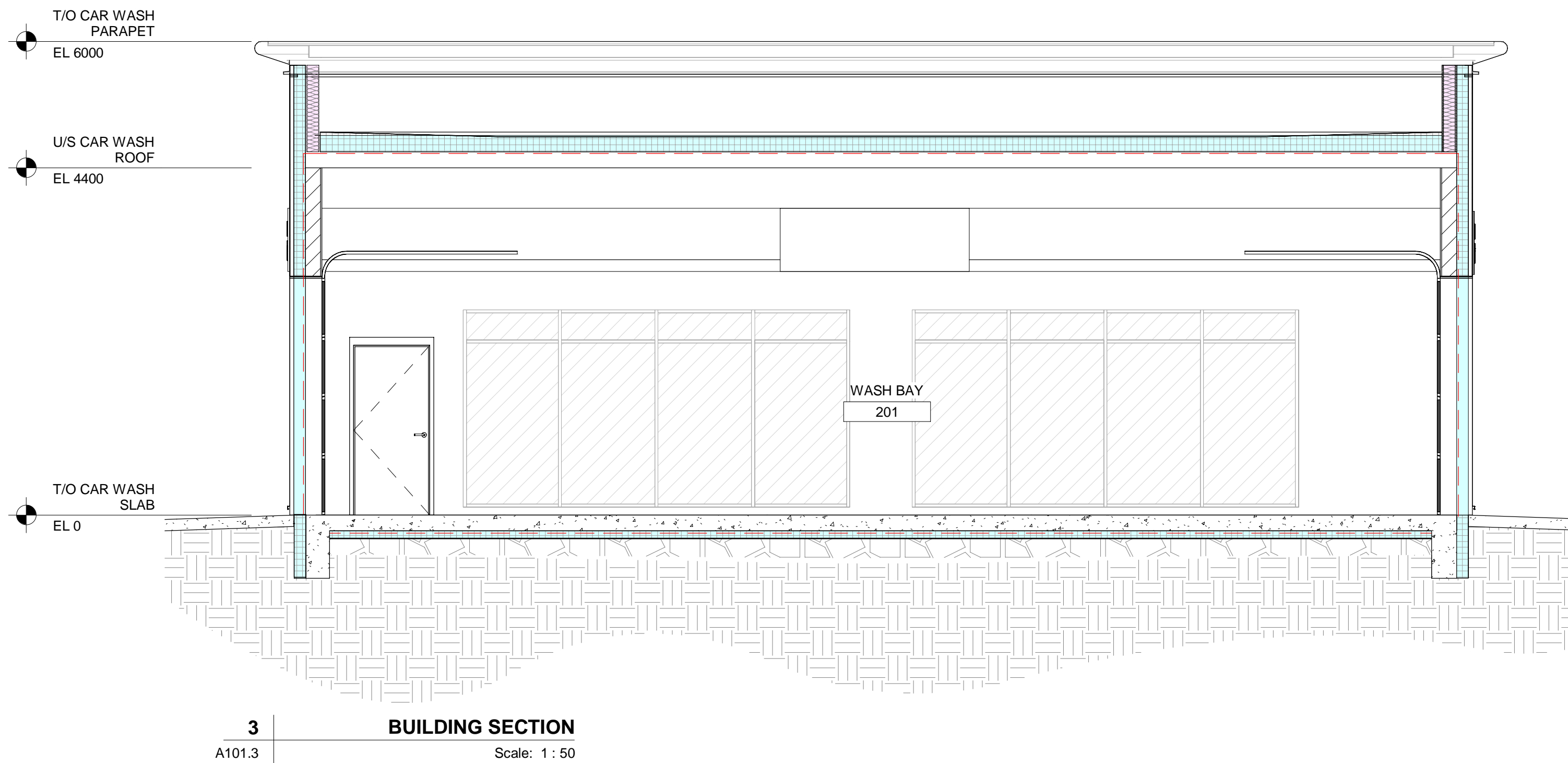
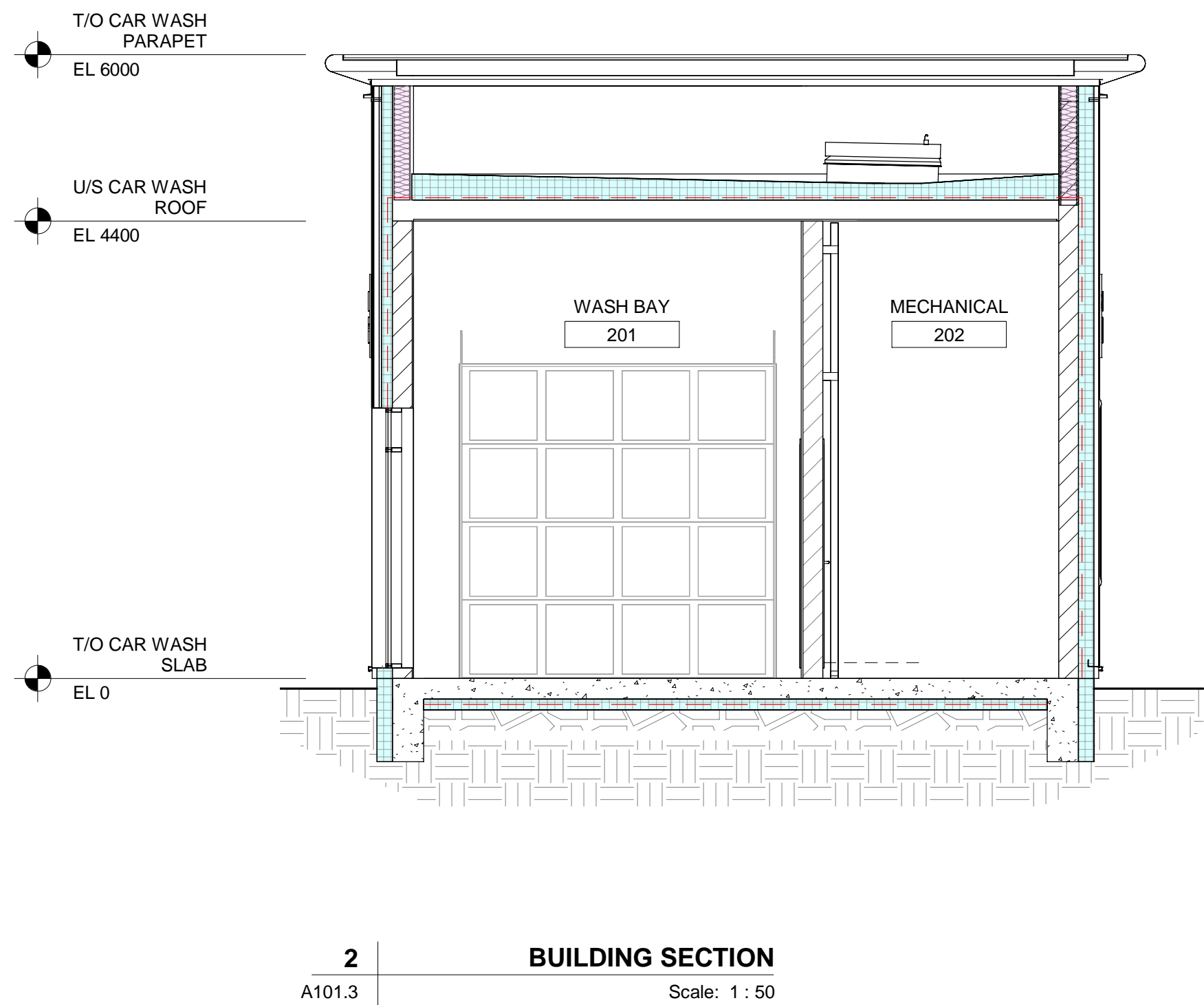
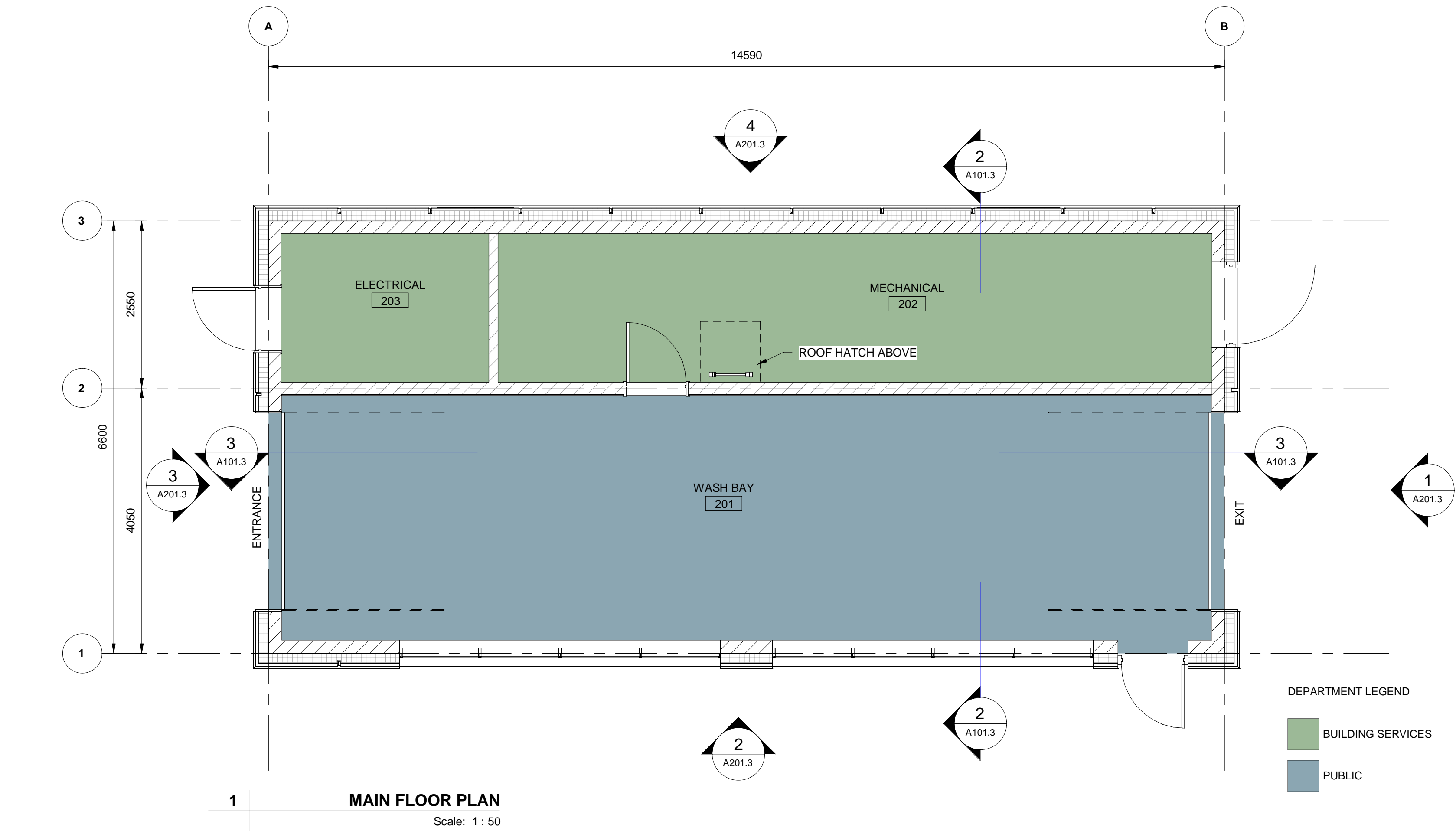
A201.2



Project Management Initials: Designer: Designer Checked: Checker Approved: Approver ANSI D 22"x34"

Last Plotted: 1/31/2019 6:32:55 PM  
Filename: BIM 360/Shell Canada - Heritage Hills NTI160546152\_Shell A18 - Heritage Hills - Carwash.rvt  
1/31/2019 1:11:11 PM

Printed on % Post-Consumer Recycled Content Paper



**AECOM**

Canada Architects LTD.

PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com

CONSULTANTS

AECOM Canada Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com



REGISTRATION

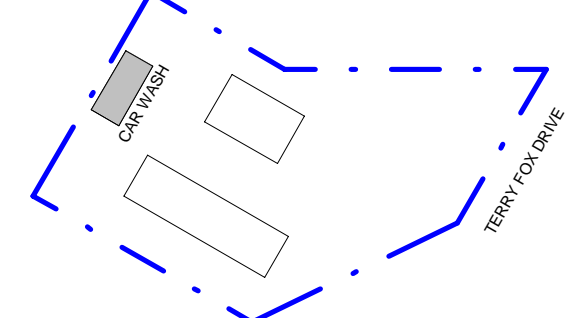
ISSUE/REVISION

DATE	DESCRIPTION
C 2019.02.01	ISSUED FOR SPA
B 2018.11.16	ISSUED FOR REVIEW
A 2018.07.04	ISSUED FOR REVIEW
IR	DATE
	DESCRIPTION

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

CAR WASH

MAIN FLOOR PLAN, BUILDING SECTIONS

AECOM FILE NAME

A101.3-EQP-HEH

SHEET NUMBER

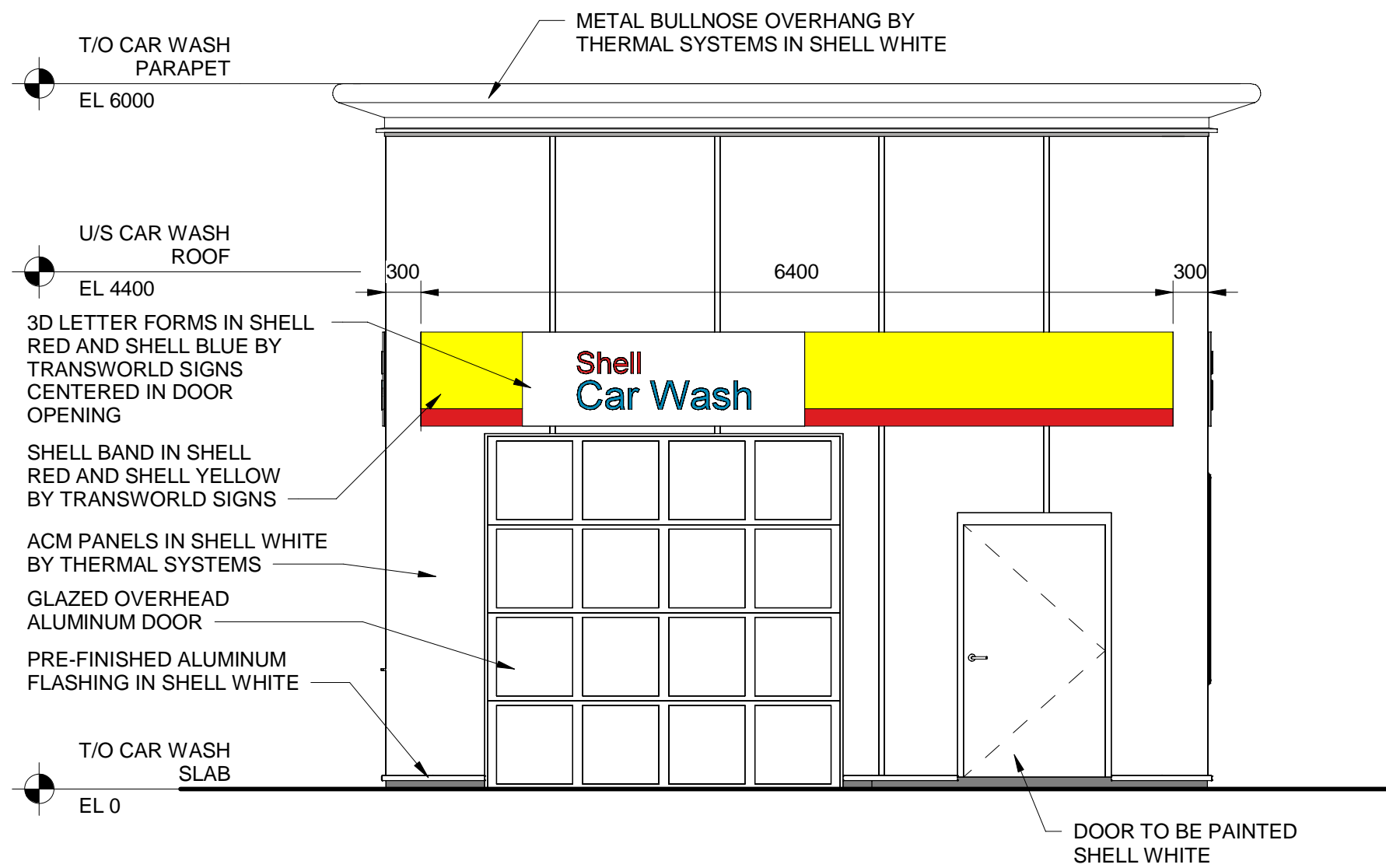
**A101.3**



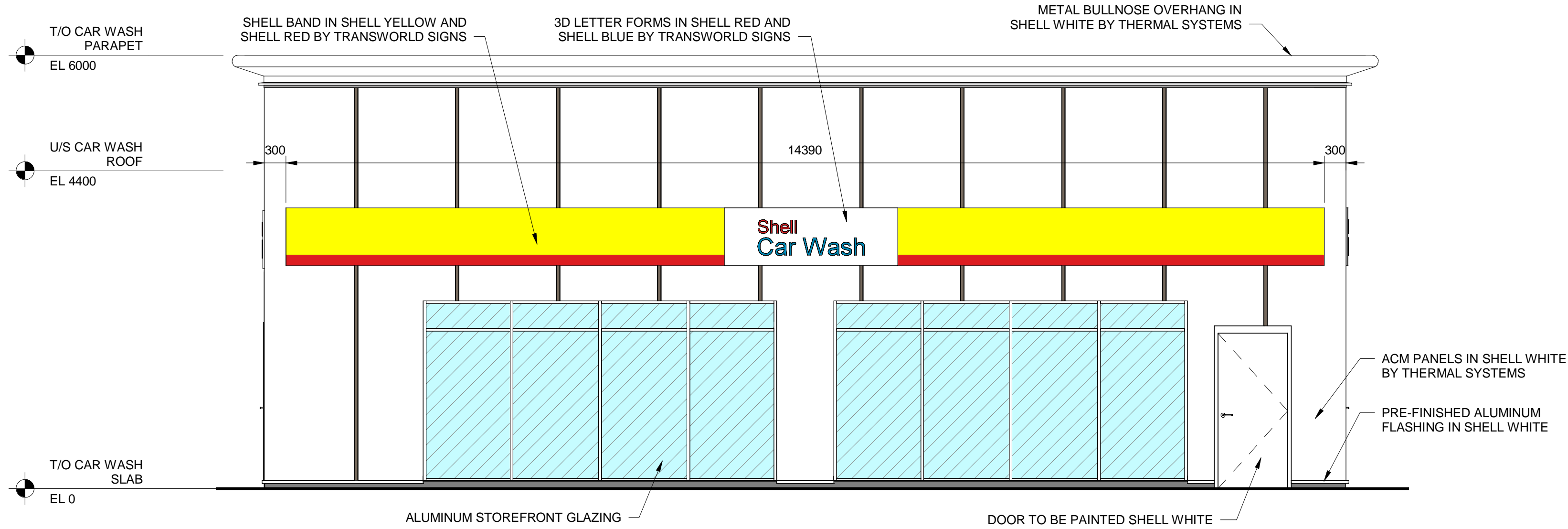
Project Management Initials: Designer: Designer Checked: Checker Approved: Approver ANSI D 22"x34"

1/31/2019 6:32:55 PM  
BIM 360://Shell Canada - Heritage Hills NT160546152\_Shell A18 - Heritage Hills - Carwash.rvt  
Last Plotted: 1/31/2019 6:32:55 PM  
Filename: BIM 360://Shell Canada - Heritage Hills NT160546152\_Shell A18 - Heritage Hills - Carwash.rvt

Printed on 100% Post-Consumer Recycled Content Paper



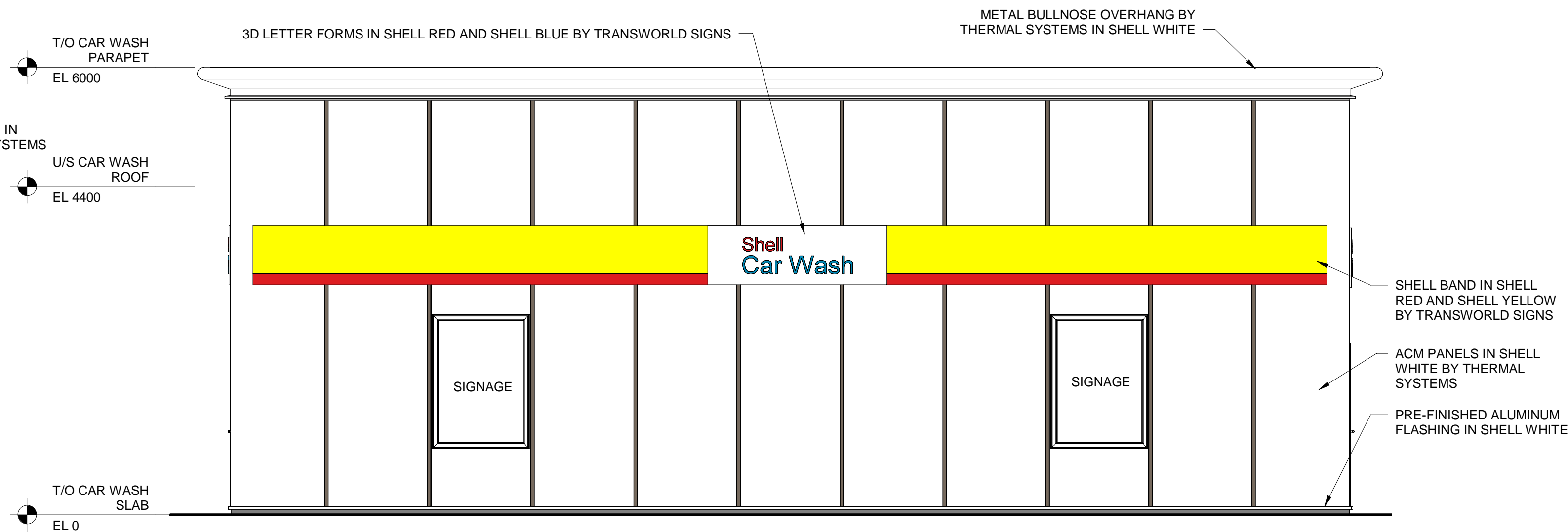
1 NORTH ELEVATION  
A101.3 Scale: 1 : 50



2 EAST ELEVATION  
A101.3 Scale: 1 : 50



3 SOUTH ELEVATION  
A101.3 Scale: 1 : 50



4 WEST ELEVATION  
A101.3 Scale: 1 : 50

AECOM

Canada Architects LTD.

PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com

CONSULTANTS

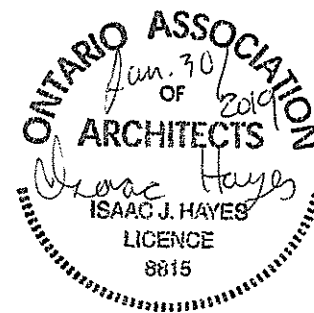
AECOM Canada Ltd.

4th Floor - 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel/604.294.8597 fax

www.aecom.com



REGISTRATION

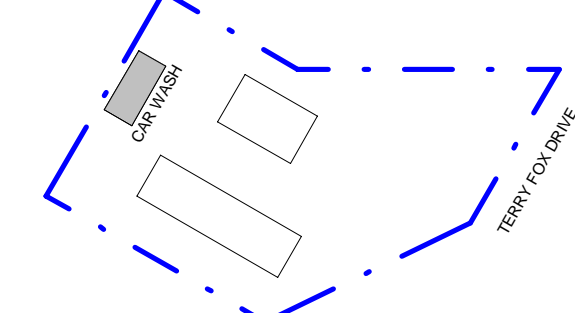
ISSUE/REVISION

IR	DATE	DESCRIPTION
C	2019.02.01	ISSUED FOR SPA
B	2018.11.16	ISSUED FOR REVIEW
A	2018.07.04	ISSUED FOR REVIEW

DRAWN BY

TF

KEY PLAN



PROJECT NUMBER

60546152

SHEET TITLE

CAR WASH

EXTERIOR ELEVATIONS

AECOM FILE NAME

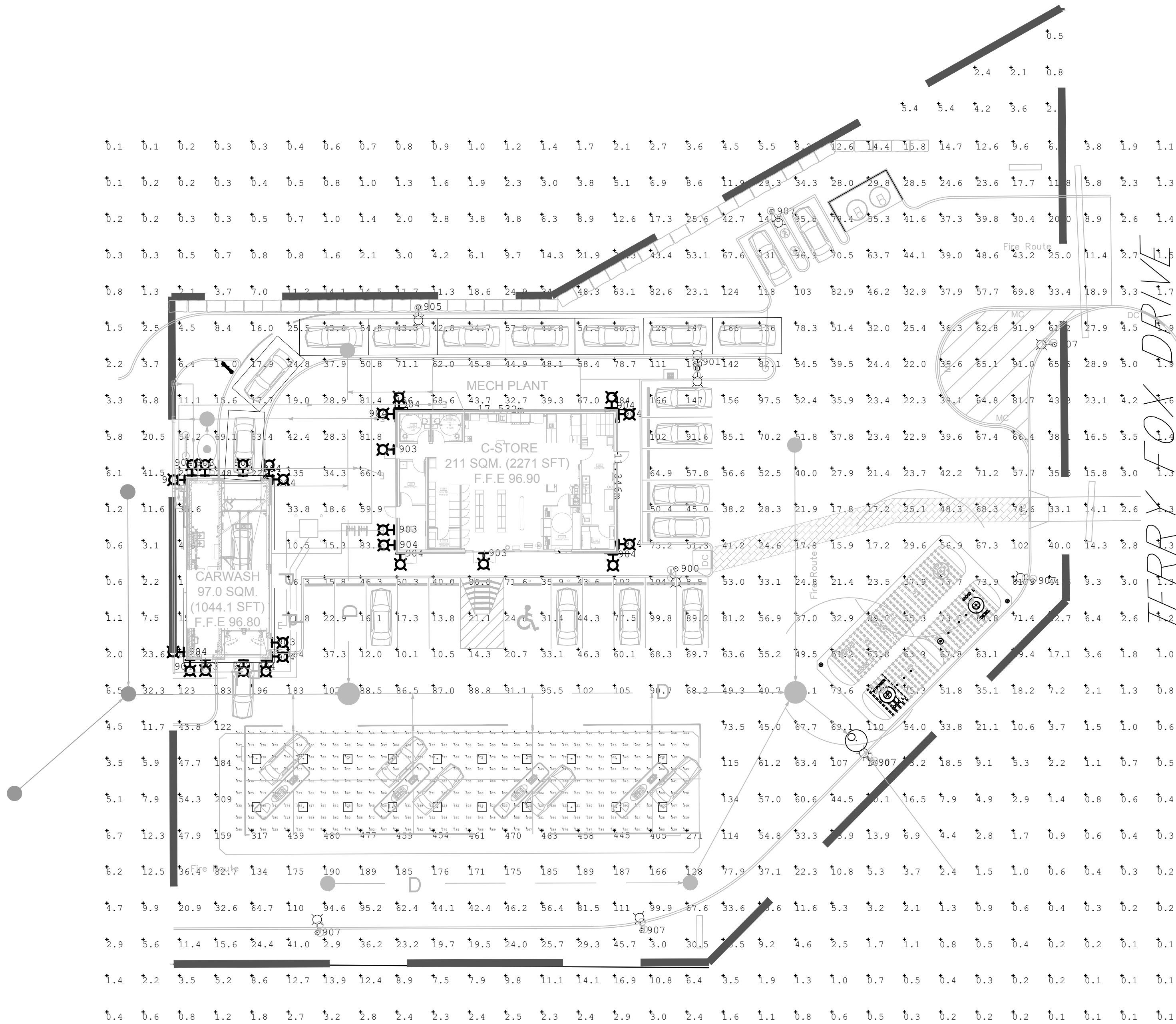
A201.3-EXE-HEH

SHEET NUMBER

A201.3

©2018 AECOM Corporation





SCALE — 1:250

Luminaire Schedule							
Symbol	Tag	Qty	Height	Manufacturer	Catalogue #	Arrangement	Description
	907	6	6.4m	CREE INC	OSQ-A-NM-3ME-T-57K-UL-WH (C/W BACKSHIELD)	SINGLE	POLE MOUNTED W/ BLSLF
	905	1	6.4m	CREE, INC	OSQ-A-NM-3ME-T-57K-UL-WH (C/W BACKSHIELD)	SINGLE	POLE MOUNTED W/ BLSLF
	904	16	2.4m	GE LIGHTING SOLUTIONS	GE-EWLS01015AF750N1FMMWHT	SINGLE	WALL MOUNTED 2400mm AFF
	903	8	2.7m	GE LIGHTING SOLUTIONS	GE-EWLS01040AF750N1FMMWHT	SINGLE	WALL MOUNTED 300mm ABOVE DOOR
	901	1	6.4m	Cree Inc	OSQ-A-NM-3ME-T-57K-UL-WH	BACK TO BACK CO	POLE MOUNTED
	900	1	6.4m	Cree Inc	OSQ-A-NM-3ME-T-57K-UL-WH	SINGLE	POLE MOUNTED
	800	20	4.75m	CREE, INC.	CAN-304-SL-RS-06-B-UL-WH-700-PML	SINGLE	CANOPY RECESSED LIGHTING

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Canopy Calculation	Illuminance	Lux	533.73	717	224	2.39	3.21
C-store-Canopy Link	Illuminance	Lux	58.96	183	10.1	5.84	18.12
Entrance	Illuminance	Lux	239.62	467	11.4	21.02	40.96
Exit	Illuminance	Lux	45.50	91.9	20.0	2.28	4.60
Tank Nest	Illuminance	Lux	63.13	81.8	37.9	1.67	2.16



PROJECT

Shell Canada Products  
Heritage Hills NTI

471 Terry Fox Drive  
Kanata, Ontario

CLIENT

Shell Canada

400-4th Avenue SW  
Calgary, AB T2P 0J4  
403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Architects Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com

CONSULTANTS

AECOM Canada Ltd.  
4th Floor - 3292 Production Way  
Burnaby, BC V5A 4R4  
604.444.6400 tel 604.294.8597 fax  
www.aecom.com



REGISTRATION

LEGAL DESCRIPTION  
BLOCK 170, PLAN 4M-1413

ISSUE/REVISION

ISSUE/REVISION		
B	2019.02.01	ISSUED FOR SPA
A	2018.11.16	ISSUED FOR REVIEW
I/R	DATE	DESCRIPTION

DRAWN BY

AD

KEY PLAN

PROJECT NUMBER

60546152

SHEET TITLE

SITE PHOTOMETRIC PLAN

AECOM FILE NAME

E101.0-SPP-HEH

SHEET NUMBER

E101.0